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ORIGINAL ARTICLES.

HERNIAL PROTRUSION OF THE MUCOUS MEMBRANE OF THE TYMPANIC CAVITY, THROUGH THE MEMBRANA TYMPANI, IN SOME CASES OF CHRONIC PURULENT OTITIS MEDIA.

By CHARLES H. BURNETT, M.D.,

PROFESSOR OF OTOLGY IN THE PHILADELPHIA POLYCLINIC, ETC.

SOMETIMES there may be observed a protrusion of the mucous membrane of the promontory, through a perforation of the membrana into the fundus of the external auditory canal, in cases of chronic purulent otitis media.

The chief interest and importance of these cases consist in the resemblance of the protrusion to granulation tissue, or to a small polypus, and the possible mistaking it for such formations. There are, however, some distinguishing features connected with the hernial formation which will enable the observer to make a correct diagnosis. The hernia of the mucous membrane is sensitive to the touch, forms suddenly, does not bleed easily upon being touched, but bleeds profusely if wounded, and yields quickly to the proper treatment, which, however, is quite different from that applicable to granulations or to polypi. The latter are not sensitive, bleed easily, as a rule, upon being touched, and are snared off or cauterized without pain. Granulations may be made to disappear by the application of powdered borax in cases where they are small, or by cauterants if larger. Hernia of the mucous membrane of the tympanic cavity is made worse by any endeavor to snare it off, or to cauterize it.

It closely resembles, in appearance, a polypus with a broad base, but can be properly treated in two ways only, first either by the application of powdered boric acid, or boric acid and alum in the proportion of ten grains of the latter to one ounce of the former, or by the instillation of absolute alcohol.

The discharge attending it is usually slight, and of a thick, purulent nature. There is no tendency to spontaneous bleeding from the protruding mucous membrane, though I have observed it exhibiting a tendency to recur at the menstrual epoch in women. It is also worthy of note that this affection of the tympanic mucous membrane has been observed by the writer only in women.

At present I have under observation a case of hernia of the tympanic mucous membrane in a lady 35 years old. It seems to have been consequent upon an acute process in the middle ear, from the entrance of sea water while bathing. The disease which followed, perforative inflammation of the middle ear, was neglected, and finally improperly treated for a year after its occurrence. The ear was then found

to present the above described hernial protrusion of the mucous membrane of the middle ear, with a slight, purulent discharge, and the hearing was reduced to nearly nil. One or two applications of powdered boric acid, and calendula arrested the discharge, the hernia receded, and the edges of the perforation in the partition and upper part of the membrana became visible. The mucous membrane in the drum cavity became smooth and pale, and the hearing improved slightly. These appearances and conditions remained until a subsequent attack, when the hernia again reappeared. Subsequently, upon several occasions, sometimes upon the patient's taking cold, and again near the menstrual epoch, without any apparent cause, the ear, without pain, began to feel stopped, and in twenty-four hours from these symptoms, enough purulent matter was formed in the canal to block it from the fundus to the meatus, but not enough to run out. Upon removing this, the protrusion of the mucous membrane of the tympanic cavity was seen to have occurred through the perforation in the membrana. All the symptoms subsided upon the application of the above named treatment.

The attacks have finally become less frequent, of shorter duration, and the hearing has improved decidedly, so that words can be heard six or eight feet. Latterly alcohol instillations have been made in this case with marked and further benefit to the mucous membrane of the entire drum-cavity.

Upon an occasion, this patient, when absent from home, applied to another physician for relief from one of these attacks. He unfortunately was not acquainted with the nature of the case, mistook the hernia for a polypus and endeavored to snare it off. The operation was very painful, produced faintness and dizziness in the patient, the hemorrhage was considerable, and an otitis externa of several days' duration was thus set up. Nitrate of silver applications are also resented by these protrusions of the mucous membrane. Its application is also painful, while instillations of alcohol are not. I have seen only two or three such cases, but the peculiar liability to be mistaken for polypi or polypoid growths, as well as their resentful demeanor to the treatment applicable to true polypi or granulation, has induced me to record my experience with them.

THE GERM THEORY OF HEALTH.

By EZRA M. HUNT, M.D.,

OF TRENTON, N. J.

WE have had good occasion for many years past to hear much of the germ theory of disease. So soon as the microscope confirmed the earlier observations of Boehm, Hallier, Mitchell, Cowdell, and others, it came to be recognized that the air teemed with life, either in animal or vegetable forms, and

that human life depends very much upon its power to hold its way among the vast resources of being, either as helped by other life, as resisting or overcoming it, or as having capacity to adjust itself thereto. Even when it came to be known how much of this life is vegetable, it was hard to disabuse the mind of the animal idea, so that now many a tyro "germist" is looking most for animalculæ.

Harder still has it been to get rid of the idea that the germ theory or hypothesis is one of disease and has nothing to do with health. This is very natural, since most of the investigations have had as their point the finding out of the relations of microbes as causes of disease. Growth by fission, and growth by spores, were alike examined to see how the multiplication tended to evolve or to destroy animal life. Hence in our search for the evil genii we do not often remind ourselves

"that these organisms and their spores are found almost everywhere in nature in enormous numbers. . . . The surface of the animal body is covered with them, and in the mouth and parts of the alimentary canal they flourish in great luxuriance. All dust contains them, and the soil is the habitat of many forms of the greatest importance in the plan of nature. These organisms play a very important rôle in nature, and *without them vegetation, and with it animal life, would greatly diminish, if not entirely cease to exist.* . . . The microscopic fungi, or these lowest forms of plant life, are essential for the maintenance of all life." (Watson Cheyne, 1884.)

If there is any one thing demonstrable as to them, it is that they are intended to conserve the health and vitality of the higher forms of life. They reduce complex chemical substances to the simple forms in which they become available as foods. How this is done is illustrated in their relation to fermentation, and in other processes. Sometimes the work is completed by one form or species of life. In other cases these carry it only through certain stages, and other forms complete it. The laws of their growth and death; of the changes which they make in the soil, or in the host in which they grow or die; the changes which they themselves undergo, are so multifold and so minute that the student of this biology may well know that he is in a boundless museum of infinitesimal life, in which what he sees and what his enthusiasm may lead him to think he knows, has relations and modifications which, in order for absolute conclusions, almost require a minuteness of knowledge equally boundless. No wonder that we have different observations, and different inferences from observations by equally skilled observers. If is often a question as to any given microphyte, whether it is it or its secretion, or the changes it has wrought, that give trouble, and how much the soil or host is a factor in the special result.

The acquisition of specific properties by once harmless microphytes is not by any means inconceivable, and is not to be met by any off-hand analogy, such as that the egg of a goose never hatches a chicken. The attenuated and benign microphytes of Pasteur, obtained from malign ones, seem to furnish analogues to the experiments of Dr. Buchner, whom Virchow calls a good observer, and who, by various methods

of culture, claims he can obtain a bacillus anthrax from a bacillus subtilis and vice versa. There is also much in the words of Dr. Sansom (1882) worth thinking about:

"I consider the differences of soil even of more importance than those of organisms in determining the nature of the specific diseases. I have long considered that there is a balance of probability in favor of the view that the specificities of disease are rather a matter of cultivation than of morphological distinctiveness."

Similar to this is the statement of Dr. Thorne, in his paper before the Epidemiological Society of London. Granting the relation of vegetable germs to specific diseases, he says:

"I know of no ground for refusing to believe that organisms capable of producing minor and incommunicable disease in particular stages of their growth, may, in other stages of their growth, or in the course of their subsequent (race) development, become capable of producing a major disease, communicable from person to person; the affair being essentially one of soil. This is *not at all a question of the development of a living organism out of matter independently of antecedent life; but merely the production by means of a process of evolution, of that which gives to an already existing organism that property by which it becomes infective.*"

We see enough of acquired habits and proclivities which change the nature, and enough of what happens to plants under varied conditions of culture, to teach us that there is wideness of range in the changes which may happen, which quite disturbs identification, and which in the yet new field of infinitesimal disease-producing botany may claim as distinct, microphytes originally of one family, and capable of reverting or of acquiring irreversible type under certain conditions of culture or of host.

This is all the more true, since we have come to know of the marvellous history of some plant hybrids, and what great fertility they have.

This and much more that might be adduced in the same line of suggestion leads us to ask that the germ theory of health should now receive some consideration. If, as a working hypothesis, we start with the idea that the minute organisms were originally healthy, and helping forms of infinitesimal plant life meant to affect us only in a conservative way, we then come to inquire how they came to be changed in their qualities, and to take on specific and disease-producing qualities. Approaching the study from this direction, we seek to retrace the steps by which it became virulent, and to culture it back again to its original conservative benignity. We inquire what the host or soil it has found, has had to do with its abnormal and destructive changes, and maybe we can work on to modify the quality of soil, as well as the acquired constitution of the plant.

In such a study, perhaps, we come to find how it might be possible for cholera infantum, and for cholera, to grow into distinctness from diarrhoea; how diphtheria, derived from a series of aggravated throat distempers, should acquire a specificity of its own; how yellow fever may belong to bilious, remittent, or typhus; how typhus and typhoid were once one and the same disease; how Sydenham was not beggled when he thought scarlet fever and measles

one; how *rötheln* can be claimed to be a kind of hybrid. Amid the varied forms of bacilli found in the intestines of a cholera victim, it is well if we are able to select out the "comma" as the one which is pathognomonic of the disease, or which may have been a result or a cause of the disease. But it will be still better if we can get its genealogy and know the line of its development from more benign sources, or the relation and the cause of the relation which *susceptible* persons bear to its development. So we could test the view of Dr. George Harley that a fungus which may have no toxic properties when grown on one soil, may acquire toxic properties, sufficient to be deleterious to animal life, when grown in another. The very same thing has been known as to certain fish in our own waters, not as an incident, but as a uniform fact.

It seems to us high time to begin to study germs as originally fitted to aid and preserve human life, so that we may study them, not only as causes of disease, but find the lines of their departure from the norm. So we will come, not only to know what form is characteristic of a disease, but come to know whence came the change which has been wrought. So, instead of secondary causes, we may come back to the primary causes and find how much soil, host, etc., had to do with the beginnings; how much of the evil is due to the food, or to the secretions of the plant, rather than to itself. With what we now know of the laws of evolution, and how all pervading they are, we shall never rest with the idea of inherent or natural and distinct specificity as in the beginning the vicious attribute of all these countless forms of minute life.

While the physician or biologist who practises only in the laboratory may be quite sure that original specificity explains everything, there are multitudes of very observing practitioners who believe that they have had cases where diphtheria, typhoid fever, etc., arose independent of a previous case of that exact disease.

When Dr. Milligan, in 1881, received replies on this point from fifty-eight active and able practitioners of England, twenty-four replied positively that they had treated cases both of typhoid fever and diphtheria, which they believed not to have been derived from cases of the same disease. The views of Murchison as to typhoid fever are to-day the views of a large proportion of the practising physicians whose names are not so often in print as those of specialists.

The fact that a great majority of these diseases are derived from an antecedent case does not prove that all are so derived. "I have no doubt," says Niemeyer, "that in the course of centuries new infections observed have developed and taken the place of others that formerly prevailed. There is no ground for asserting that a disease is either *only* miasmatic, or *only* contagious." The failures in the doctrine of absolute specificity were ably presented in the International Medical Congress of 1881, by Professor Hueter, of Griefswald. In looking over the best authorities among active practitioners of medicine, we are struck with the number who believe in cases of fevers, of diphtheria, of whooping

cough, of scarlet fever, etc., not derived from a previous case of the very same disease. All that we claim is that the finding of a form of minute plant life invariably present in a certain disease does not prove that the disease arose from that plant. It may be a "spore," a hybrid, or evolution from some harmless microphyte, a peculiar soil or condition of host having developed it into virulence, and caused it to come to have the specific type of some well-known disease, which now in *most* cases is derived from an antecedent one; and it is as important a study as to how that infinitesimal plant life got out of health, as it is to know of its action after it has become a cause or concomitant of disease. Perhaps in the thousands of generations which they accomplish in a few weeks we may culture them back to mildness, as Pasteur is doing, and in addition so establish a benign nature as to make a germ theory of health as prominent before our minds as a germ theory of disease.

YERBA SANTA AND GRINDELIA ROBUSTA IN ACUTE BRONCHITIS.

BY E. STUVER, M.D.,
OF RAWLINS, WYOMING TERR.

ABOUT four years ago, shortly after their introduction, and while treating a number of cases of bronchitis with very indifferent success by means of the old orthodox cough mixtures, I began using the above remedies. At first I used yerba santa alone, and obtained very satisfactory results. About that time the medical journals contained numerous reports of the singularly beneficent effects exerted by *grindelia robusta* in asthma, and it occurred to me that it would be a valuable addition to a cough mixture, especially when designed for the relief of the very annoying cough attending bronchitis, a cough which, while the person is up and moving about during the day causes almost no inconvenience, but as soon as the recumbent position is assumed, commences with greater or less severity and continues sometimes for hours, depriving the sufferer of much needed repose, and proving a source of annoyance both to patient and physician. Accordingly, I began using the following, viz:

R.—Fl. ext. *grindeliæ robustæ*,
Fl. ext. *yerbæ santæ*, āā f̄ij.
Syrupi *tolutanæ* vel. *simplicis*, q. s. ad f̄ijij.—M.
Sig.—ſj to ʒij every hour or two when needed for cough.

This combination gave very satisfactory results in the great majority of cases; indeed, in some instances it acted like a charm, instantly controlling the cough and relieving the tickling in the throat and bronchial tubes.

I have now used the preparation about four years in a large number of cases, and have obtained very gratifying results. In one instance I administered it to a medical friend, who was suffering from an attack of so-called "Mountain Fever," accompanied by bronchitis and harassing cough; and so prompt was the relief afforded, and so highly pleased was he with the effect of the remedy that he has used it almost exclusively as a cough mixture in his practice since that time.

I have repeatedly used the preparation for cough and irritation of the bronchial tubes in my own case, and it always afforded prompt relief.

Many other cases might be cited with the same results, but enough has been said to indicate its field of usefulness. While I have not noticed so decided an amelioration of the cough due to chronic bronchitis or phthisis pulmonalis, as of that due to acute bronchitis, still in many cases considerable relief is obtained. I have now under treatment a lady about seventy years old, suffering from an aggravated chronic bronchitis, the symptoms of which were markedly alleviated by this preparation. Whether our high altitude (6730 feet above sea level), and light, dry atmosphere, have anything to do with the results obtained, I am unable to say; but if the preparation yields as good results in a lower altitude, and damper atmosphere as I have obtained from it here, it will confer a real benefit if used in properly selected cases.

The preparation is free from the unpleasant effects, such as headache, constipation, etc., which frequently follow the use of cough mixtures containing opiates. I have noticed no unpleasant effects following the use of small doses, but when large doses are administered temporary nausea may supervene. I have always used Parke, Davis & Co.'s fluid extracts.

HOSPITAL NOTES.

DISPENSARY FOR NERVOUS DISEASES, BALTIMORE.

Service of JOHN VAN BIBBER, M.D.

CLINICAL NOTES.

In view of the vast amount of valuable clinical material which is concentrated at the service of the Dispensary for Nervous Diseases, it is proposed to commence a series of clinical records, in which a practical account will be given of most instructive and interesting cases which come under observation. In the details of these cases I shall give the notes of my assistant, Mr. H. C. Ohle, and add to them whatever observation in regard to the progress and treatment of each case I may see fit.

The rapidly increasing literature of nervous diseases renders clinical observation especially valuable at this time. As far as is possible, importance and accuracy of detail will be in no respect neglected. But it must be remembered that many of the cases which present themselves for treatment at a clinic devoted exclusively to nervous diseases are in their origin obscure, and often ill-defined in their symptoms and progress. This class of cases may or may not be very interesting, and it will be my endeavor to select only those which are worthy of record.

It should also be remembered that the treatment of many diseases of the brain and spinal cord has heretofore been considered useless, impracticable, or merely tentative, and I look forward with great pleasure to being able to demonstrate that the efficiency of therapeutic means, in many of these conditions, has in the last few years been much enlarged and enriched. As a proof of this assertion, I have selected for the first case of this series a typical and marked one of saturnine paralysis, in which atrophy had progressed to a very decided extent

in the extensor groups, and paresis was apparent in the arm and shoulder muscles. The prognosis in this case was doubtful, and after three months' treatment the result has been satisfactory and favorable in every particular. I submit the following account of the case from the notes of my assistant:

Lead Paralysis.

I. B., 38 years of age, presented himself for treatment at the dispensary March 30, 1885, suffering from paralysis of the extensor groups of muscles of both forearms.

The patient is a painter, this having been his occupation for nearly twenty-five years. He had enjoyed good health during all this time until about one year ago, when his appetite failed him, he became restless at night, lost strength, and, in his own words, "was very miserable." He stated that about six months previous to the time his health began to fail, he had little to do at his trade, and to curtail expenses he began grinding and mixing his own paints.

After this his health began to fail and his condition gradually grew worse. However, he continued at work. About the beginning of last October he noticed a slight weakness in the fingers of his right hand, followed by the same symptoms in fingers of the left hand. This weakness gradually increased, until there was complete paralysis of both forearms. This general condition grew worse and finally culminated in November in a severe attack of colic, which lasted about two weeks. He suffered severe pain during this time, and finally got relief by taking various purgatives. He has not had another attack since.

The patient had not done any work at his trade since November, being disabled by the paralysis. His general health improved again, but the paralysis grew more pronounced. He sleeps well, has a good appetite, and appears well nourished, with the exception of his arms.

On examination, I find that the extensor groups of muscles of both forearms are paralyzed and much atrophied. Temperature of extensor surface much reduced. No reaction on passing a strong faradic current. Same negative results with galvanic current.

Treatment.—Was ordered full doses of iodide of potassium, combined with ammonium carb.; and to promote circulation massage was ordered, and a stimulating liniment to rub well over the atrophied muscles, and to return daily to the institution for electrical treatment.

April 1.—Got slight reaction in affected muscles of left arm on applying faradic current, after use of galvanic current.

2d.—Got slight reaction in affected muscles of both arms on applying faradic current, after use of galvanic current.

4th.—Muscles of both arms contract more perceptibly under strong faradic current.

6th.—Applied Van Bibber's artificial extensor muscle to both arms, with instructions to wear apparatus as much as possible.

9th.—Decided improvement in both arms.

15th.—Was put on iodide of ammonium, tinct. gentian, and tinct. calumbæ.

17th.—Was put on spts. Mindererus and spts. nitric ether to promote perspiration. Noticed gradual improvement under continued use of battery.

May 14.—Patient much improved; can hold hands out straight, and strength returning. Said he wrote a note last night.

June 30.—Patient says he will not return again, as he considers himself cured; has gone to work again.

Remarks.—This case presents a very instructive feature in the rapid recovery of the muscular fibres of the extensor groups after such decided atrophy had set in. During a comparatively short treatment the recovery was remarkable, for taking into consideration the bad import of entire absence of faradic reaction, and the existence of a grave toxic atrophy, the prognosis was very unfavorable; yet the result shows what can be accomplished by faithful and persistent treatment, which was carried out actively during each day, for during the interval between the manipulations, frictions, and electricity the patient wore the elastic apparatus to prevent the strained and injurious position which is always the result of this form of paralysis.

The following case is highly interesting both in regard to the localization of brain functions and to the well-known fact of the possible mutilation of that organ without a fatal result, or without corresponding suffering or disablement. I take from the notes of my assistant the following history:

Traumatic Hemiplegia (Left).

W. Y., twenty years of age, presented himself for treatment at the dispensary, on February 20, 1885, suffering from left hemiplegia. The following history of the case was obtained: On June 30, 1884, with suicidal intent, he shot himself in right temple, about one inch superior and half inch posterior to outer angle of eye. The bullet was discharged from a twenty-two calibre pistol, held close to the part entered. He was unconscious for about twenty-four hours. On recovering consciousness, it was found that he was paralyzed on left side, both upper and lower extremities. The hemiplegia was pronounced and complete.

He was attended by the family physician and after six weeks partial motion gradually returned to the paralyzed leg, so that he was able to move around with some assistance. In this respect the case followed the usual history of hemiplegia. On examination on the day he was entered for treatment, he presented the following symptoms, viz.: Left arm totally paralyzed with slight secondary contracture. Left leg partially recovered, but has not the same strength nor same motility as in the right leg, and the muscles are not so well developed. Right eye is suffused, slight ptosis, and on ophthalmoscopic examination optic nerve is found to be atrophied. Has constant buzzing in ear of right side, which condition has been present ever since he received the wound. He presents also another curious symptom, viz., whenever he gapes, the paralyzed arm in a lazy sort of manner rises to his head, this is uncontrollable. Patient claims that he has often made an effort to keep his arm from rising, but never succeeds unless he forcibly holds it with the other hand. His health is good, sight in left eye good, hearing good in both ears notwithstanding buzzing in right ear. Appetite good, sleeps well, intellect not impaired, no pain in head.

He was put on the following treatment, viz.: Internally he was given ammon. iodide, tinct. gentian, and

tinct. calumbæ. He was told to return every alternate day and have faradic current passed through the paralyzed muscles.

This treatment was continued with benefit to patient: his left leg got stronger and more developed, his left arm has improved slightly and is much stronger, although still nearly useless. The right eye was kept under observation, but as it was found that trophic changes had already commenced in the cornea, he was sent to an oculist, who after a time decided that it must be enucleated, sending the following report: "Present condition of right eye: corneitis paralytica, exfoliation beginning in the centre. Atrophy (total) of the optic nerve. Paralysis nervorum abducentis et trochlearis, and also rami recti superioris and lavatoris palp. sup. (ptosis). The operation for extirpation was successfully done about the latter part of June. The orbit was found in good condition. Patient now wears an artificial eye. He is still under treatment."

Remarks.—The group of symptoms presented by this patient makes the direction and course of his injury a most interesting problem to solve, the more so from the fact that under certain circumstances surgical interference might do much to remove or improve his paralysis. The eye symptoms, involving the optic nerve, motor oculi, and the ophthalmic branch of fifth nerve of the right eye, and a slight condition of exophthalmos in left eye, would lead us to suppose that the ball has crossed directly from point of entrance and lodged somewhere contiguous to, or pressing upon the orbit of left eye. On the other hand, the passage of the bullet in this direction could not account for his paralysis, unless it was the result of hemorrhage or the pressure of some spicula of bone detached from the inner table of the skull. This pressure might reach the ascending frontal convolution, which is superior to the point of injury, and thus cause the paralysis. It is clearly impossible that the corpus striatum of the right side could have been involved in the injury, so we must look to the cortex or motor centres to explain the hemiplegia.

Taking into consideration the nature of the injury, the close proximity of the pistol to the skull at the time of shooting, and the probable course of the ball, it has been suggested to the patient to undergo a trephining operation over or adjacent to the spot where the ball entered. This operation would be done with the hope of relieving the hemiplegia, for it would enable us to see the condition of the inner table of the skull at the point of injury, and also the appearance of the membrane at that spot.

In the next series an account will be given of this operation, which will be performed at an early day.

MEDICAL PROGRESS.

THE TREATMENT OF CHOLERA.—The principal physician in charge of the Cholera Hospital at Barcelona assured the *Times* correspondent that he was able to save 95 per cent. of the cases brought under treatment before the algid period, but hardly 30 per cent. after it had fully developed. Most of the patients brought to the hospital were in a very dangerous condition; and of the deaths that occurred 75 per cent. had taken place within 24 hours of the arrival of the patient. With respect to the treatment, he found that, to produce the re-

action, friction with rags steeped in ice water, followed by subcutaneous injections of ether, was most effective. To stop the diarrhoea doses of tannin and enemas of dilute perchloride of iron were useful; but most successful of all was the hypodermic administration of laudanum, which was thus retained in the system and checked the vomiting. To maintain the purity of the air, ozone was discharged in the dormitories, and all dejections instantaneously disinfected. — *Medical Times*, October 10, 1885.

The treatment which, according to *The Lancet*, has been most successful in the recent outbreak in Italy, has been large doses of laudanum given *coup sur coup* at the very first attack of diarrhoea, however slight.

THE PHYSIOLOGY OF THE INTESTINES.—PROFESSOR FUBINI AND DR. LUZZATI (*Moleschott's Utersuch.*, xiii. Bd., Heft 5), in a series of experimental contributions to the physiology of the intestines, have observed:

1. That in the small intestine of the dog there is on an average an hourly secretion of 10.6 gr. of *succus entericus*.

2. The average specific gravity of pure intestinal juice of the dog at a temperature of 24.8° F. is ordinarily 1010, and its reaction alkaline.

3. Intestinal movement, however produced, is plainly irregular and peristaltic.

4. The velocity of intestinal movement in the dog is about eleven inches per hour, the average length of the intestines being about 4.8 metres.

5. The bile in a marked degree favors the peristaltic movement of the intestine.

6. During sleep intestinal peristalsis is diminished but does not entirely cease.

7. High temperatures greatly favor intestinal peristalsis, while depression of temperature retards it.

8. The force of peristalsis in the intestine of a dog is sufficient to overcome a resistance of one hundred and twenty grains.

9. Stimulation of the right or left vagus in the neck produces no alteration in the velocity of the peristalsis of the intestine, whether produced by a weak, strong or intense induced current.

10. The mucous membrane of the intestinal tract, in which the fistula existed, during such stimulation is markedly injected. — *Lo Sperimentale*, August, 1885.

COCAINE IN THE TREATMENT OF THE OPIUM HABIT.—DRS. H. SMIDT AND C. RANK report the trial of cocaine in the cure of the opium habit. In the three cases in which the remedy was used favorable results were obtained, and, without doubt, it aided in completing the cure.

In one case, by the use of the cocaine, cure, which previously had required twenty days for its accomplishment, was brought about in less than twelve days.

Maniacal exaltation was observed in one of the three cases, and was, without doubt, attributable to the drug. Concerning the efficacy of cocaine in the treatment of the opium habit, the conclusions are:

1. Cocaine, in the treatment of the opium habit, is a valuable remedy, modifying and abridging it, and while indispensable, is accompanied by no unfavorable results or sequelae worthy of mention.

2. By the modified, slow withdrawal of the narcotic,

as practised in the cases reported, decreasing doses of morphia and increasing doses of cocaine were administered.

3. Cocaine is best administered, hypodermatically, in a five per cent. aqueous solution.

4. A medium single dose, subject to increase, is five-sixths of a grain.

Doses of from one and a half grains to two grains can be administered without harm. Doses of more than three grains are dangerous.

5. So far as the present observations are concerned, the organism did not appear to become accustomed to the cocaine. — *Berliner klin. Wochenschr.*, September 14, 1885.

PERFORATING ULCER IN DIABETES.—Perforating ulcers of the foot have become associated with the protean *tabes dorsalis*. So far as we are aware, no observer has hitherto claimed any special association of perforating ulcer with diabetes. M. Laffon has put on record a case in which these two symptoms went together.¹ The patient was a man, aged sixty-one, who about the age of thirty-nine experienced, as the result of a shock, what he called a fever in his left foot accompanied by violent lightning pains. About a year later the big toe of the left foot became swollen, and the first and fourth toes gradually ulcerated. Later the other toes were attacked in the same fashion. Anæsthesia was present only for short distance around the ulcers. The right leg was attacked at times with painful cramps. The urine contained a large proportion of glucose. The disease of the toes was said to have some likeness to *ainhum*. If there were other symptoms of *tabes dorsalis* or of diabetes as a disease, no mention is made of them in Laffon's account. — *The Lancet*, Sept. 26, 1885.

THE TREATMENT OF CYSTALGIA IN WOMEN BY RAPID AND FORCED DILATATION OF THE URETHRA.—CHARLES MONOD, in a discussion of the treatment of cystalgia in women by rapid and forced dilatation of the urethra, classifies the various forms of the affection as:

1. Cystalgias due to lesion of the urethra (polypi and fissures).

2. Cystalgias symptomatic of a lesion of the bladder—inflammation, tumor, tubercle.

3. Cystalgias symptomatic of lesions in other organs, as those of the uterus and its annexa, or of the other pelvic viscera.

4. Cystalgias of nervous origin—*e. g.*, as symptomatic of locomotor ataxia.

5. Such manifestations of the affection as can be traced to no cause, and which may be considered as idiopathic.

The treatment of these various conditions by forced urethral dilatation is advocated—

1. In urethral affections dilatation is beneficial because exerting a beneficial influence upon the spasmodic and painful element of the disease, and also upon the lesion which has produced and maintains the cystalgia.

2. In cystalgia caused by neoplasms, dilatation, while affording temporary relief, can only be recommended as a means of diagnosis, preparatory to the ablation of the tumor.

¹ *Journal de Médecine de Bordeaux*, Sept. 13th.

3. In the treatment of simple cystalgia, injections of boracic acid, nitrate of silver, and sedative preparations should be tried before resorting to surgical procedure.

When urination is persistently painful and frequent, forced dilatation, which frequently gives unexpected relief, should be tried before establishing a vesico-vaginal fistula. Observation shows that this method of treatment causes pain to disappear, and also improves the condition of the vesical mucous membrane, while it also permits the easier application of local remedies. In tubercular cystitis, dilatation may be practised as a final measure for the relief of pain.

4. In conditions designated as irritable bladder, forced dilatation is especially efficacious, whether the cystalgia depends upon fissure of the cervix uteri, disease of the uterus, vagina, rectum, or anus, or is, indeed, unassociated with any recognizable lesion.—*Annales des Maladies des Organes Génito-Urinaires*, May and June, 1885.

THE TREATMENT OF CHOLERA.—PROF. PETER, in the course of his remarks upon the treatment of cholera, recently, asserted that the first indication is to combat the irritation of the digestive apparatus and solar plexus, for which purpose he applies a large blister to the epigastrium; in plethoric individuals he would not hesitate, he says, to put half a dozen leeches on the pit of the stomach. The pain and the cramps he endeavors to subdue by the hypodermic administration of morphia. He also advises the use of the constant current, one pole being placed on the vertebral column and the other on the epigastrium. Owing to the difficulty that is often experienced in employing electricity, he recommends the use of Chapman's spinal ice-bags as likely to fulfil the same indication, as he mentioned last year at the École de Médecine; he has tried this treatment in twelve cases, of which only two proved fatal. Indeed, he seems then to have been even more enthusiastic in its favor than now, though he has had no fresh experience to cause him to modify his opinion. Here is what he then said on the subject: "From the first application there was a notable diminution of the vomiting, of the epigastric pain, and of the cramps. The patients became warm and the pulse perceptible. This modification of the epigastric pain is interesting, for the ice-bag is far from the epigastrium, but it exerts its influence by modifying the innervation of the great splanchnic nerves. In respect to the cramps the same thing occurs. To say that ice applied to the bodies of the sufferers, already algid (almost icy cold) warms them, is a paradox, and nevertheless is not less than the truth. In fact, by putting an end to the spasm of the bloodvessels the blood is allowed to circulate, and consequently the animal heat is generated afresh. In short, ice applied along the spine and the continuous current produce similar results; but the effects of the ice are more durable than those of electricity. This superiority is due to the prolonged application of the ice, whereas the continuous current was only applied during two or three hours each day.—*Medical Times*, September 26, 1885.

THE PLURALITY AND DIVERSITY OF NEOPLASMS IN THE SAME SUBJECT AND IN THE SAME FAMILY.—M. RICORD, at the suggestion of M. Verneuil, in an investi-

gation of this subject, has undertaken to demonstrate that contrary to the views hitherto held tumors of diverse nature may exist in the same subject—either at the same time, or periods more or less distinct. In the first and second parts of his work, M. Ricord considers benign and malignant tumors respectively, and the coexistence at the same time—on the same subject—of different forms of each variety. In the third portion of his thesis, the author discusses the coexistence of malignant and benign neoplasms in the same subject, concerning which fact he brings forward incontestable evidence.

All varieties of benign tumors seem to be able to be combined with malignant growths. The frequency of myomata places them at the head of the series, followed by sebaceous cysts, lipomata, and, finally, by fibromata and adenomata; the author further shows the combination of benign and malignant tumors in the uterus alone, and in a second series of observations collects instances of benign tumors of one organ coexisting with malignant growths in another; e. g., fibroma of the uterus and cancer of the liver; lipoma of the dorsal region, and cancer of the kidney; epithelioma of the rectum, and lipoma of a limb.

A series of observations finally is given, by which the possibility of the transformation *in situ* of a benign into a malignant growth, either by operation or spontaneously, is established.

M. Ricord further holds that having demonstrated a possible multiplicity of benign, as well as of malignant, tumors, these two diatheses, apparently so distinct in character and manifestations, should be united in a single diathesis—the *neoplastic*.—*Gazette Médicale de Paris*, September 19, 1885.

THE TREATMENT OF TAPEWORM.—DR. T. SPENCER COBBOLD publishes, in *The Lancet* of September 26, reports of additional cases of tapeworm, bringing his series up to two hundred cases. His additional experience fully confirms all that he has previously urged in favor of male fern remedies as compared with kousou, turpentine, pomegranate root, bark, and other drugs.

EXPERIMENTAL RESEARCHES UPON THE PHYSIOLOGICAL PATHOLOGY OF THE THYROID BODY IN THE RABBIT.—DR. GUIDO TISSONI gives the following results of his experiments on the pathological physiology of the thyroid body in rabbits:

1. In the rabbit the epithelial elements of the spleen take part in the physiological increase of the organ, by active indirect scission.

2. The change of these elements diminishes progressively as the organ approaches complete development.

3. In the adult rabbit, the scission changes in the epithelial cells are entirely absent or very rare, though in this animal the thyroid belongs to a group of organs whose elements have the greatest stability.

4. Reaction of the thyroid body in the rabbit to mechanical or thermic stimuli, occurs but to a slight extent, at least if estimated by the small number of epithelial cells in which changes due to the irritation are present.

5. In the rabbit, as in the dog, the complete removal of one lobe of the thyroid produces neither alteration nor hypertrophy of the other lobe.

6. The partial reproduction of this gland, though not frequent is possible, and the new formation of glandular tissue takes place perferably in the breadth, and more rarely in the length of the organ.

7. In such partial regeneration, the glandular development always occurs slowly and most frequently remains incomplete.

8. In this partial reproduction of the thyroid, it has been impossible to establish the precise method by which the glandular neo-formation is accomplished.

9. A total regeneration of the thyroid in the rabbit is possible, though verified still more rarely than the partial reproduction of the organ.

10. In total regeneration it has not been possible to determine in what parts the newly formed nodes are developed and whether they can arise from accessory thyroid organs, which on account of their diminutive size have escaped observation during operation.

11. The newly formed tissue, resulting in the partial as well as in the total reproduction of the organ, is identical histologically with that of the normal thyroid, except that in the former the glandular elements are separated by a greater quantity of connective tissue.—*Gazzetta degli Ospitali*, June 17, 1885.

OPISTHOPORIA.—This rare disease (*ὀπισθοπείρα*, backwards; *πείρα*, a going) has just been described more fully than heretofore by Dr. Mazzotti in his "Clinical and Necroscopic History of a Man who presented the phenomenon of going backwards." The man in question was sixty-six years of age, and for a year before he entered hospital was subject to giddiness. He was a hard drinker, and became so, as he said, because he "suffered from scorbutus." He got rid of his scorbutic affection, but shortly afterwards he found that instead of going forwards when he tried to walk he went backwards. On putting his feet to the ground he swayed somewhat from side to side, stretched his legs apart like one afraid of losing his balance and falling, and when exhorted to walk he moved, with great effort, stepping backwards. He was for five months in hospital, during which time he was often made to test his walking powers, but always with the result above stated. He ultimately died of ulcerous colitis, and on post-mortem examination the intracranial nerve-centres presented no other appearances than a slight degree of leptomeningitis and a highly atheromatous condition of the arteries at the base. Dr. Mazzotti's conclusion is that the phenomena presented by his patient during life were due to a simple disturbance of the endocerebral circle (*un semplice disturbo di circolo endocerebrale*), and he agrees with Nothnagel, that "to the clinical phenomenon of going backwards in walking no value can be attached as diagnostic of a localized cerebral lesion."—*The Lancet*, Sept. 26, 1885.

ANTIPYRIN.—At a late meeting of the Cambridge Medical Society, DR. MACALLISTER gave an account of the nature and uses of antipyrin, and in illustration of its valuable antipyretic properties showed the temperature charts of two patients recently treated in Addenbrooke's Hospital. Both suffered from phthisis, apparently limited to the apices of the lungs, and manifested by muco-purulent sputa, wasting, slight hæmoptysis, and the physical signs of consolidation and cavity. In

one case, that of a man aged twenty-five, hectic fever made its appearance; the morning temperature was 98°, the evening 102°. Antipyrin in fifteen grain doses, administered twice in the course of the afternoon, promptly reduced the range of daily oscillation to 1°, about the normal temperature. An omission of the drug was followed by recurrence of the hectic; but again the temperature fell, and was maintained low by five grain doses given thrice a day. At the same time the patient became more comfortable and slept better; some tendency to sweating was checked by minim doses of solution of sulphate of atropia.

The other case, that of a woman aged forty-four, with still more urgent symptoms, and a temperature ranging from 98° to 103°, was treated in a similar way with equally good results. The relief and general sense of well-being produced by the medicine was a notable feature, and there was no untoward symptom. In neither patient was any rash or marked nausea produced, and both were in little more than a fortnight so much better that they were transferred to the out-patient department.

Dr. MacAllister thought that in many affections in which fever is a symptom it is sound practice to attempt to reduce the temperature for its own sake, just as we try to soothe pain when we can, irrespective for the moment of the fundamental disorder; antipyrin, of all the antipyretics he has tried, seems to be the most powerful with the fewest disadvantages. If experience justifies this conclusion, the drug may take its place beside morphia, being the allayer of fever as that is of pain.—*The Lancet*, October 10, 1885.

NEW TREATMENT OF PERIUTERINE HÆMATOCELE BY NEGATIVE GALVANO-PUNCTURE.—At the meeting of the Association Française pour l'Avancement des Sciences, held August 1, 1885, MM. APOSTOLI and DOLÉRIS presented a paper, read by the former, upon the electrical treatment of uterine hæmatocele by galvano-puncture. In an abstract of the paper forwarded to THE MEDICAL NEWS by the authors, their views are expressed as follows:

The action of the galvanic current is contemporaneously favorable with its application, the diffuent and non-retractile, soft eschar of the negative pole being utilized, and its effect being limited to the point of puncture made by the trocar. This method of puncture, therefore, primarily permits the opening without danger of a morbid collection, more or less deeply located, and places it, on the fall of the eschar, in communication with the external, which, when it occurs, forms a fistula which is more or less permanent, contracting adhesions with the pathological cavity and the exterior (the skin or mucous membrane).

This first action, which is limited and localized as desired, varies with the strength and duration of the current used. The production of an artificial fistula has the double advantage of permitting, in the first place, the natural elimination of the contents of the sac and of opening a passage of variable calibre through which topical and antiseptic treatment may be applied. It may also be added that the cicatrices left by the negative eschars are non-retractile, and only slightly visible.

In addition to the first action, which is entirely surgical, a second and medical action results, entirely dynamic and trophic, and destined to modify the nutrition of the pathological collection (abscesses, cysts, etc.), and to produce a process of retrogression more or less rapid.

The general application of the continued current is tributary to this entirely medical application: when it is intended to cure muscular hypertrophy, to abort a commencing inflammation, to resolve a ganglionic hyperplasia, to produce the regression of a fibrous tumor, or one of the connective tissue, etc. In every case, though apparently different, the idea of intervention is identical; the current, the vehicle of chemical, mechanical, and dynamic action, will advantageously influence the nervous system, which regulates all nutritive changes, accomplishing this probably by multiplying the normal electrical currents which accompany all organic movement.

Under this conception, MM. Doléris and Apostoli introduced the electrical treatment of periuterine hæmatocele, and consider that this first step in therapeutic gynecology will soon be followed by others, and that perimetritis and chronic inflammation will be found amenable to the same treatment.

The following is a summary of the method to be pursued in the application of the current:

1. *Nature of the Intervention.*—This is ordinary puncture followed by the *chemical galvano-caustic* action, which should always be *negative*.

The effects of the basic, non-retractile eschar should be utilized, which, subsequent to a variable loss of substance incident thereto, will produce a fistula which will be maintained for several days.

2. *The Location of the Puncture.*—This should be, as far as possible, in the centre of the tumor, and the loss of substance be here produced, care being taken at the same time to avoid the uterus, the intestine, or any great vessel. Combined rectal and vaginal touch will reveal the situation of the respective organs, and the arterial pulsations will render apparent the seat of any great vessel which it is necessary to avoid.

3. *The Dose of the Operation.*—This should be as great as possible, the resulting fistula and eschar being directly proportionate to it. The ability to employ 100 milliampères is necessary and easily accomplished, inasmuch as the other pole (the positive in practice) is converted into an entirely negative pole, by the employment of potter's clay, which is soft and plastic, spread upon the surface of the electrode.

4. *The Duration of the Operation.*—This, like the dose or its intensity, should be regulated according to the loss of substance and the ulterior dynamic effect it is desired to produce; from five to six minutes will generally be a sufficiently long time for its application.

5. *The Time of Operation.*—This should be as early as possible, and every uterine hæmatocele as soon as diagnosed should be punctured without delay, which in every case renders the prognosis more serious.

6. *The Number of Operations.*—A single galvano-puncture will generally suffice to obtain the desired therapeutic effect and the production of a sufficient fistula. If, by chance, the opening close too soon and the destruction of the sac is not complete, a second application of the current is permissible.

7. *The Technique of the Operation.*—The details of the operation which should be sedulously observed are the following: Any pile which will produce a sufficiently intense current, which should be estimated by a perfect galvanometer, is suitable for the operation. The Léclanché pile is the best of medico-electrical cells. The trocar should be of moderate size, and should penetrate to a depth of from $\frac{3}{4}$ to $\frac{1}{2}$ of an inch. The indifferent pole should be a large cake of potter's clay placed upon the abdomen or thigh of the patient. The vagina should be protected by a glass or caoutchouc muff surrounding the trocar almost to its point.

8. *Steps Consecutive to the Operation.*—Strict antisepsis should be practised during the operation. The trocar should be heated preparatory and subsequent to the operation, and strong carbolic injections should be made twice daily into the sac, preceded by cleansing and sponging if possible.

9. *Complications.*—Puncture interfering with a great vessel may give rise to serious hemorrhage, which should be controlled as rapidly as possible by the immediate introduction of, and forced dilatation with, Gemrig's speculum, maintained in position for a considerable time.

The authors of this valuable paper finally conclude:

1. That in this certain and safe method of treatment of uterine hæmatocele, the ordinary gravity of prognosis is much diminished, and a more rapid cure obtained.

2. That generally the tubular cauterization of Triper (térébration galvano-caustique) has a twofold action, surgical and medical, as before explained.

ANODYNE MIXTURE FOR DYSPEPSIA.—M. GERMAIN SÉE recommends:

R.—Tr. hyoscyami,
Tr. conii aa f3jss.
Tr. gentiani f3jss.
Sp. anisi gtt. x.—M.

S. Ten to thirty drops at each meal in painful dyspepsia and in cancer of the stomach.—*L'Union Médicale*, September 24, 1885.

TREATMENT OF INFANTILE ECZEMA.—TIRERA (*Revue Thérapeutique*, October 1, 1885) recommends the following preparation for the cure of infantile eczema:

R.—Vaselini 3j.
Picis liquidæ,
Hydrarg. chlor. mit. aa 3ss.—M.

Apply two or three times daily until cure is effected, unless the remedy becomes too irritating, when its use should be suspended for a short time. When the eruption is situated upon the head, a valuable and convenient adjuvant to the treatment is a rubber cap.

LIGATURE OF THE SUBCLAVIAN ARTERY FOR AXILLARY ANEURISM.—MR. BENNET MAY records, in *The Lancet*, for October 3d, a case in which the subclavian was ligated for spontaneous axillary aneurism of eight months' duration in a man of 61. Catgut was used. The patient died on the eighth day from exhaustion, from causes unconnected with the operation. The aneurism had undergone improvement, and it was be-

lieved that the operation would have resulted in complete recovery had not death from extraneous causes ensued.

Mr. May has collected and analyzed 21 cases of axillary aneurism operated on since 1873; of these, fourteen were treated by ligature of the subclavian, of which number ten recovered, with cure of aneurism, which was of spontaneous origin, sacculated, and pulsating in all; one died of delirium tremens; one failed owing to the slipping of the catgut ligature; two failed from too free establishment of collateral circulation (both were cases of traumatic, pulseless aneurism, not suitable for ligature); amputation of the shoulder-joint was subsequently performed, with one recovery and one death. One case underwent spontaneous cure. Two cases were cured by digital pressure—both sacculated, pulsating aneurisms. One case died under galvano-puncture. Three cases were treated by the old (Syme's) operation, of which number one was cured (very small, spontaneous), one died of hemorrhage (very large, traumatic and diffuse), and one was cured (traumatic—no particulars).

The result brings out prominently the satisfactory character of treatment by ligature in appropriate cases. The previous high mortality must have been in a great degree accidental and separable from the operation; and the improvement, we may conclude, is unquestionably owing to better methods of wound treatment and materials of ligature. In fact, we may now fairly reconsider the subject from a new standpoint—viz., that of the antiseptic animal ligature—and conclude that for aneurisms of apparently spontaneous origin, which pulsate, which are encysted, or are not very widely diffused, there is no reason whatever for excluding the axillary artery from all the advantages of the Hunterian procedure.

It may be noted that compression of the artery above the clavicle has yielded good results, endorsing Mr. Holmes's recommendation that it should be the rule of practice in the first instance whenever practicable. With regard to other varieties, cases of recently ruptured artery, or of ruptured aneurism with diffusion, and with little or no pulsation, such evidence as there is in these cases is in favor of the accepted custom of treatment by the old (Syme's) method, with a reservation in favor of amputation if found impossible of completion.

EXTENSIVE CICATRICAL STENOSIS OF THE VAGINA, DUE TO LONG RETENTION OF A FOREIGN BODY.—BREISKY (*Prager med. Wochenschr.*, 1885, No. 9) records an interesting case of cicatricial stenosis of the vagina of a young woman aged 28 years, who neither had given birth to children, nor aborted.

For seven years she had experienced severe abdominal pain during menstruation, and in the intervals between the menstrual periods an ill-smelling discharge was constant.

Examination revealed the fact that the vagina was a small blind sac. By rectal examination, a fluctuating tumor the size of an orange was discovered behind the uterus, containing a solid body having the shape of a spool. The patient now confessed what she hitherto concealed, that seven years previously she had introduced into her vagina a spool which she was unable to withdraw.

During menstruation entrance to the tumor was discovered with a filiform bougie, and without great difficulty the stricture dilated so as to permit the introduction of two fingers and the consequent removal of the foreign body, and complete recovery of the patient. —*Centralbl. für die med. Wissenschaften*, September 9, 1885.

THE COMBINED ACTION OF COCAINE AND ATROPINE IN IRITIS.—MR. WALTER H. JESSOP, in *The Lancet* for October 10th, recommends, in the treatment of iritis, the use of disks, each containing $\frac{1}{100}$ grain of cocaine hydrochlorate, and $\frac{1}{100}$ grain of atropine.

He finds that they quickly cause great dilatation of the pupil, relief of pain, diminution of ciliary congestion, and decrease of intraocular tension when present. Now, in the active stages of iritis, as in inflammation of any other part, we have congestion of the vessels of the iris, and this gives rise to sluggishness, or even to contraction, of the pupil, followed often by posterior synechiæ. Therefore any treatment, to be successful, ought to be directed to relieving the iris of blood, and dilating the pupil as quickly as possible, so as to remove the papillary edge of the iris from the central portion of the capsule of the lens. The pain, which is such a prominent symptom of iritis, is, he believes, due either to the turgid state of the vessels, giving rise to tension of the iris, and so to pressure on its nerves, or to the tension of synechiæ. Considering the physiological action of the drugs employed, we find that atropine produces mydriasis by paralyzing the endings of the oculo-motor nerve and the unstriated muscular fibre of the iris, and, according to most observers, by stimulating also the dilating mechanism of the pupil. The action of atropine on the bloodvessels of the iris is apparently of little importance, as any constricting influence would be quickly followed by dilatation. Cocaine, as he showed in a paper before the Royal Society on June 18, 1885, acts by stimulating the ending of the mydriatic nerve of the eye, and also by constricting the small bloodvessels, thus producing a very large mydriasis, acting always to the movements of light and accommodation. Thus we see that neither drug produces alone all the effects necessary in the treatment of a case of iritis; but the combination of cocaine and atropine gives us all these—viz., an *ad maximum* dilatation of the pupil, constriction of the vessels of the iris, and inaction of the pupil to light and accommodation. The *ad maximum* dilatation of the pupil produced by this combination keeps the pupillary border of the iris away from the capsule of the lens, preventing adhesions, and also breaks down synechiæ when formed by stretching them, and by constricting their vascular supply literally starves them. From these facts doubtless ensued the excellent results of cocaine and atropine in the cases above enumerated; but Mr. Jessop would not, of course, suggest that this combination will have much effect in cases of old complete posterior synechiæ, but rather that we have in it a therapeutical remedy much more potent and certain in action in iritis than atropine. The rapid cessation of pain, which he has always seen follow the application of cocaine and atropine in iritis, enabled him to dispense with blisters and leeches in these cases.

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ACUTE ENDOCARDITIS.

At the Congress of German Naturalists and Physicians recently held at Strasburg, ORTH made a valuable contribution towards the solution of certain questions concerning the nature and etiology of acute endocarditis. Klebs, and others, regard all acute inflammatory processes of the endocardium as mycotic, or due to the presence of microorganisms, but certainly, in many cases of the simple warty or verrucose endocarditis, micrococci cannot be found, nor has Orth been able, by the culture method, to demonstrate their presence. The malignant or ulcerative form, on the other hand, is characterized by the constant presence of microorganisms in the vegetations and in the secondary embolic lesions, and the problems here to be decided relate to the character of the microbes, whether one or several forms, and to the mode in which they gain access to the body.

Heretofore, experimenters have not been able to produce ulcerative endocarditis, either by the injection of various forms of bacteria into the blood, or by the laceration of the valve segments, but by a modification of the procedure Orth has been successful. Rabbits bear very well the operation of lacerating the valves by means of a sound passed into the carotid, and, as shown by Rosenbach, endocarditis does not necessarily follow. But Orth has been able to induce a typical mycotic process by injecting microorganisms into a vein of the ear shortly after the operation, and the injured valves then show an acute inflammation with penetration of the organisms into the substance and a proliferation of cells about the necrotic regions, precisely similar to

the ulcerative endocarditis of man. The organisms also attack any regions of the aorta touched by the sound in passing, and induce a mycotic endarteritis. This traumatic disposition is only transitory, for if the organisms are injected even two days after the injury to the valves, no invasion of the tissues takes place; the injection, also, of too small a quantity of the bacteria was found to be ineffectual. Four different forms of microorganisms were found capable of inducing the endocarditis, but three other species, including the micrococcus of pneumonia, were inert. Differences in the intensity of the local action, and in the number and extent of the metastases, were found to exist with different forms.

In the discussion which followed, KÆSTER urged his well-known views of the embolic origin of the valve lesions, but VIRCHOW, KLEBS, and RECKLINGHAUSEN agreed with Orth, that the superficial and non-vascular portions of the valves were usually attacked first.

These interesting experiments throw considerable light upon the disease as it occurs in man. In the first place, malignant endocarditis is a process associated, in a great majority of cases, with other diseases, such as pyæmia, pneumonia, and rheumatism, in some of which at least microbes have been discovered. In the vegetations on the valves in different cases, the organisms have not always presented the same characters, but careful cultures will alone decide this point. In one instance Orth determined the species to be the golden staphylococcus pyogenes. Secondly, the remarkable differences in the local and general effects of the different microbes in Orth's experiments, remind us of similar differences in cases of human endocarditis, in some of which there is only the local valve affection without any metastatic foci, while in others every organ of the body presents suppurating embolic lesions. And lastly, the fact that to produce mycotic endocarditis in animals requires not simply the presence of the organisms in the blood, but the existence of a local lesion, is paralleled by the very great frequency with which, in man, the process attacks sclerotic valves; indeed, it is exceptional to find perfectly normal segments affected. The endothelium of the healthy endocardium seems able to resist the invasion of the micrococci, or, at any rate, does not offer conditions favorable to their growth; while lodging on the diseased valves they find a suitable nidus, and penetrating the tissue, induce necrosis and loss of substance.

It is a curious circumstance, that Orth was not able with the micrococcus of pneumonia to induce the disease in rabbits with lacerated valves, for on the view that the special microbe of each disease induces the complicating endocarditis, this form may be regarded as responsible for the numerous instances of severe endocarditis occurring in pneumonia.

OVARIAN HERNIA.

SIR SPENCER WELLS remarks, in his recent work upon *Abdominal Tumors*, that it is somewhat curious he has never in all his practice met with a case of hernia of the ovary. On the other hand, DR. EMERICH THOMAN has collected, in a paper published in a late number of the *Allgemeine Wiener medicinische Zeitung*, several cases of this accident, showing that it is more frequent than one would believe were he to take the experience of Sir Spencer Wells as his guide.

In Dr. Thoman's elaborate paper different varieties of hernia of the ovary are given, and examples of incarceration, of inflammation, and of cystic or malignant disease of the displaced organ are presented. MULERT, in 1867, reported two cases of primary ovarian hernia, in which the ovary alone furnished the contents of the hernial sac; he found but five similar cases reported. It thus seems that it is quite exceptional for the ovary, alone, to be found in a hernia; in most cases it has with it other organs, as the tube, the uterus, the vagina, the omentum, or a coil of intestine. It has been found that the majority of cases of ovarian hernia are congenital, and are usually associated with arrested development of the organ.

MULERT calls attention to the fact that hernia of the ovary may cause intestinal incarceration, because the entire border of the dislocated organ makes a strong band, and thus a pocket-like narrowed cavity between the uterus and the pelvic wall in which strangulation may occur; in such cases vomiting is present as in true ileus.

ENGLISCH has reported two cases of ovarian hernia, in one of which incarceration symptoms demanded herniotomy; he found both ovary and tube in the sac, to which they were strongly adherent; the sac, also, contained pus; extirpation of the ovary and tube was done, but the patient died on the thirteenth day from diffuse inflammation of the connective tissue. Englisch regards the prognosis of ovarian hernia as in most cases favorable, since strangulation rarely occurs, making herniotomy necessary.

He has added to his two cases thirty-six collected from professional literature, and of the thirty-eight thus tabulated, where the ovary alone, or the tube with it, made the contents of the hernia, twenty-seven were inguinal, nine femoral, one each through the obturator foramen, and the ischiadic. The hernia was upon both sides in nine cases, and in nine, also, the right side only, in five the left side. In most cases the disease was congenital, and in these both tube and ovary were involved in the hernia, but in the acquired cases only the ovary was included. In fifteen cases the ovary was normal, in seventeen inflamed, in five cystic, and in one cancerous. Most

of the cases of inguinal hernia were congenital, while the other varieties were generally acquired.

PUECH, in 1878, collected 78 cases of ovarian hernia. Of these 47 were congenital, 12 doubtful, and 19 acquired. In later researches he collected 88 cases of inguinal hernia, 54 of which were congenital and 27 occupied both sides; he found the disorder more frequent upon the left than upon the right side. In 19 cases of herniotomy death occurred in 6.

Thoman quotes from the *Centralblatt für Gynäkologie*, No. 1, 1885, a case of incarcerated hernia in a patient two months pregnant. The woman was thirty-one years old, and was in her fourth pregnancy. Since childhood she had a tumor in the inguinal region, which at times was very painful. Urgent symptoms required an operation, and the diagnosis wavered between omental and ovarian hernia; upon opening the sac, which was the size of an egg, it was found to contain serum and the ovary, and the ovary was removed; the ovary was absent upon the other side; the patient recovered.

HEGAR and KALTENBACH state that in congenital inguinal hernia of the ovary, the latter seems firmly fixed by a rather large base to the posterior wall of the hernial sac, and it is irreducible. On the other hand, in acquired hernia, the ovary may be alone, separated from the tube, and it is generally mobile, suspended by its elongated ligament. The congenital form is often associated with other sexual anomalies, such as partial development of Müller's canals, hernia of one horn of a rudimentary uterus, or imperforate vagina.

They hold that if symptoms of incarceration, caused by inflammation of the ovary occur, it is better to remove the inflamed organ, instead of simply incising the sac. If this operation be done, great care must be taken in tying the pedicle, for this is in many cases quite short, the ligatures slip easily, and hence great liability to secondary hemorrhage. It is thought best not to let the stump enter the abdominal cavity, but to retain it in the inguinal canal.

REFORMS IN THE DISPOSAL OF REFUSE.

THE proper method of disposal of refuse matters is a question of ever-growing importance. Existing knowledge of the chief causes of diseases, as affecting masses of population, imputes to filth a most active agency in the development of influences which are hostile to life. The relation between local uncleanness and many of the commoner ailments which afflict humanity has been so clearly shown to be one of cause and effect, that affections of such an origin are now not inaptly designated as *filth-diseases*. In order to reduce the quantity of preventable disease of this disgusting type, it is obviously the duty

of sanitary authorities to enforce cleanliness to the full extent of their responsibilities and powers. The preliminary step in this procedure is the due removal of all refuse matters and the provision for the most complete innocuousness of such matters at the place of deposit. The manner in which the fulfilment of this important service has been attempted would be an interesting subject for inquiry.

It is not our purpose to go into the details of the methods of disposal at present employed. It is sufficient to state that American cities have thus far failed to introduce any material reforms in these practices, which are as unsatisfactory as they are antiquated. The refuse of a town in an untreated state, is not considered as having any considerable commercial value, and the object of the local government has been to get rid of it in the cheapest possible manner. Schemes of utilization have failed, because attempted on a purely money-making basis. The main consideration of the immense benefits which accrue to the public health by rendering harmless these noxious matters, even though at considerable cost to the municipality, and the minor consideration of the advantages of utilization in reducing the expense of disposal, do not appear to have been rightly understood. Hence, plans of utilization entered upon with a narrow conception of the primary object, have resulted in failure. A misappreciation of the true aim of the service and a restricted economy, are chiefly to be blamed for the present faulty practices, which reflect discredit upon our cities.

The expense which a perfect system of disposal necessitates is the great obstacle in the way of its adoption. The sanitary value, which should be taken into account as a valuable asset on the credit side, seems to have been lost sight of. The least expensive plan is, as a rule, the one selected, and, as a consequence, a thoroughly efficient service is never rendered. The usual practice is to collect the garbage, dust, and ashes from habitations and the sweepings from public places, and transport them to the environs of the town; but no satisfactory disposition is made of these materials at the place of final deposit.

The local authorities seldom take the refuse removal into their own hands, but entrust this work to contractors, who are a troublesome people at best, and whose work is never so satisfactory as that done by the authorities' own servants. The uncertainty of continued employment deters them from risking the capital required for the procurement of the necessary plant. Their object being solely one of profit, they are unwilling to engage in an enterprise which requires large capital, experience, and permanency, to make it successful. Hence, the authorities are alone competent to carry out schemes which require utilization or destruction of refuse upon a comprehensive scale.

With the contract system, as generally carried out, the disposal of refuse is left almost entirely to the discretion of the contractor. Under ordinary circumstances, waste animal and vegetable matters are utilized to some extent by feeding them to swine. This practice leads to the establishment of enclosures for these animals in the environs of towns, which become the centres from which the most nauseating and unhealthful odors are distributed over entire neighborhoods. Much of the garbage finds its way into the ash-bins before removal; and this heterogeneous mixture with the street sweepings is made use of to fill in sunken places, which, in time, become the sites upon which houses are built. Disposal, by dumping into the sea, has been practised in a few instances, but, unless the point selected is distant from the land, the shores become defiled by the collection of putrescible matters. The usual disposition of excreta upon truck lands in the outskirts of a town is open to serious objection. The manner of distribution of this material is frequently the cause of a nuisance injurious to the health of the locality.

As there is no commercial value in town refuse in its crude state, except for uses which contravene sanitary law, and as these substances cannot be permitted to be cast aside to rot and poison the air and soil by their respective effluvia and soakings, the question of final disposal becomes a most serious one for solution. Their destruction or complete transformation into harmless products is the object to be sought after. Cremation has been proposed as a feasible and satisfactory method of accomplishing this object. Experiments undertaken in this direction offer great inducements to their further prosecution. The trials made at Glasgow, Edinburgh, and lately at the village of Burnley on the Thames, and in other places in England, are reported as being entirely satisfactory and the methods employed merit a test on this side of the Atlantic. By the plan adopted at the refuse despatch works at Glasgow, each day's collections, composed of the contents of ash-bins, the street sweepings, excreta, garbage, and other refuse, are transported directly to the works outside of the town. Everything which can be sold or utilized is turned to the best advantage, and the remainder reduced to inoffensive clinkers by cremation. To carry out such a scheme successfully it is necessary for the authorities to construct and manage the works themselves. In large cities it would be advisable to have a number of stations conveniently located, in order to lessen the cost of transportation.

The subject is of so much importance to the public health and comfort as to demand a close investigation of the methods already adopted with such flattering results. A change in the present practices is everywhere urgently demanded, and if relief can be had

from the nuisances for which they are responsible, the means of obtaining it should be employed without delay.

AN ALWAYS TIMELY WORD.

THE exigencies of practical teaching in our medical schools tend to hinder any marked attention to the individuality and common humanity of the patient. As a result, there is a rather wide-spread propensity on the part of students and junior practitioners, especially in hospitals, to look upon the patient in hand, not as a sentient and suffering fellow-creature, but as a more or less interesting incarnation of disease.

In the course of a recent address, PROF. OSLER made the following admirable plea for the recognition of the human element in *all* patients—a plea most opportunely addressed to an entering medical class:

"In your dealings with patients, public or private, there is but one law to regulate your conduct: 'Whatsoever ye would that men should do unto you, even so do unto them.' Kindliness of disposition and gentleness of manner are qualities essential in a practitioner. There is a tendency among young men about hospitals to study the cases, not the patients, and, in the interest which they take in the disease, to lose sight of the individual. Strive against this. Realize, so far as you can, that the mental state of the patient enters into his feelings, bear with his complaining, and scan gently his faults. The kindly word, the cheerful greeting, the sympathetic look, trivial as they may seem, help to brighten the paths of the poor sufferers, and are often as 'oil and wine' to the bruised spirits entrusted to our care."

REVIEWS.

THE TEN LAWS OF HEALTH, OR HOW DISEASES ARE PRODUCED AND PREVENTED, AND FAMILY GUIDE TO PROTECTION AGAINST EPIDEMIC DISEASES AND OTHER DANGEROUS INFECTIONS. By J. R. BLACK, M.D. 12mo. pp. 413. Baltimore, Md., 1885.

THE demand for this excellent little work has been so great that a second edition was exhausted some years since, and the present issue affords the seeker after health a revised and highly improved guide to the great *sine qua non* of all enjoyment. Dr. Black writes, in part, to obviate the complaints which are frequently made, that physicians do not endeavor to instruct their fellow-beings as they ought, in reference to the preservation of health. He offers his work with the noble purpose of contributing to the total eradication of disease, which he believes may hereafter become possible. Our author admits that man, although now more than ever monarch of the earth, is himself a poor, weak, sickly, suffering, short-lived creature; but contends that this lamentable state of human affairs is due to the

fact, that for want of efforts in the right direction our race has hitherto displayed the immensity of its resources in making nature pliant to its will, but only the poverty of its resources in overcoming the causes of the numerous evils which torment its own body.

The volume is divided into two parts; the former of which comprises the ten sanitary commandments, with explanations, rules for their due observance, and detailed warnings as to the evil results of their violation. The second part is devoted to a consideration of the contagious, infectious, and pestilential diseases, with a preliminary account of the germ theory of disease, which is declared to be an accepted doctrine among physicians, the evidence in its favor being manifold and convincing. By the practical application of this theory, including the various recognized methods of destroying or shutting out the microbes of cholera, smallpox, scarlet fever, and so forth, as pointed out in the appropriate chapters, our author contends that these dreaded maladies may be prevented from spreading, in households and in neighborhoods, with great certainty.

The value of this useful volume would, in our opinion, be increased by a careful formulation of the Ten Laws of Health into definite ordinances, printed in bold type at the heads of the respective chapters, which now present somewhat the appearance of elaborate commentaries upon texts, which have themselves been inadvertently left out. Its otherwise handsome appearance is slightly marred by occasional infelicities of diction such as the following, which occurs in the preface on page 7: "The bedside of the very first cases of a deadly infection is then the only time, and the only place, to successfully arrest its spread." Still, the lessons taught by the writer, in his admirable comments upon the health laws, are rarely rendered imperfect by deficiency in clearness of expression; and notwithstanding a few verbal blemishes, the work is well calculated to accomplish a vast amount of good in the world.

SOCIETY PROCEEDINGS.

NEW YORK STATE MEDICAL ASSOCIATION.

FIFTH DISTRICT BRANCH.

First Annual Meeting, held at the Mansion House, Brooklyn, October 13, 1885.

THE PRESIDENT, JOSEPH C. HUTCHISON, M.D.,
IN THE CHAIR.

MORNING SESSION.

THE PRESIDENT made a brief address of welcome, in which he spoke of the prosperous condition of the Association and the good work already accomplished by it. Having appointed the nominating Committee, one from each county represented in the Fifth District Branch Association, whose duty it is to nominate the Executive Committee for the ensuing year, he called for the

REPORT OF THE EXECUTIVE COMMITTEE.

This was made by the Secretary, Dr. E. H. Squibb, of Brooklyn, and contained a number of recommendations, among which was one to the effect that a committee of three should be appointed by the Chair, to act

with similar committees from each of the District Associations at the annual meeting of the parent Association in November, in formulating a general set of by-laws for all the five branches.

Another recommendation was, that the next special meeting of the Fifth District Branch should be held in Yonkers, Westchester County, on the second Tuesday in March, 1886; and both these recommendations were afterward acted favorably upon by the meeting.

DR. ROBERT NEWMAN, of New York, then read a paper on

THE PROGRESS OF ELECTROLYSIS IN SURGERY.

Having alluded to the paper which he read at the meeting of the American Medical Association in 1883, on "Electrolysis in Surgery; and Tabular Statistics of One Hundred Cases of Urethral Stricture treated by this Method," and afterward published in two parts, one in the *Journal of the American Medical Association*, and the other in the *New England Medical Monthly*, which contained a retrospect of the work accomplished in surgical electrolysis up to May, 1883, he stated that the object of the present paper was, to relate what had been accomplished in this field during the past two years.

The only absolutely new application of electrolysis that had been made during that time, appeared to be the adoption of the method in the treatment of hernia and hemorrhoids, by Dr. Craft, of Cleveland, Ohio, a member of the American Medical Association. The radical cure of hernia by means of electrolysis is new and original, and Dr. Craft's results had never before been published; the information concerning them having been received by Dr. Newman through private correspondence. In a letter to him dated May 7, 1885, Dr. Craft wrote as follows: "I have read with much interest your article on 'Electrolysis in Surgery' and its special application to urethral strictures, and I can most heartily endorse all you say in its application to strictures, having given it considerable attention. I have been using electrolysis in two difficulties that you do not speak of, namely, hernia and hemorrhoids. I have applied a positive needle electrode, properly insulated, except at the point, subcutaneously, between the external and internal rings, and allowed a sufficient galvanic current to pass between the lobes to excite quite an adhesive inflammation, being careful not to injure the cord, and to keep the needle external to the peritoneum. This results in a cicatricial healing up of the inguinal canal, and in many cases seemingly permanent."

In a subsequent letter Dr. Craft wrote that in operating the hernia should be reduced first, and the sac carried up with it, if possible. The index-finger should be invaginated in the scrotum, keeping the cord and sac, if it remain in the ring, well pressed to one side, and held there beneath the invaginated finger, which should be pushed into, or through the external ring, if possible. Then with a sharp-pointed bistoury prick through the skin over the external ring. Through this puncture push a blunt-pointed needle electrode, insulated to within a quarter of an inch of the end, carrying it well up between the rings, by the side of the invaginated finger, which holds the cord and vessels from contact with the electrode. Connect the circuit of about ten cells of a good galvanic battery, continuing the cur-

rent for about six to ten minutes, according to the sensibility of the patient, changing the point of the electrode from one side of the finger to the other, always keeping as clear of the cord as possible, and directing the current from the cord. The other electrode can be held by the patient in the hand of the side operated upon, or elsewhere, as is desirable. "You ask," he continued, "why I use the positive pole, instead of the negative. For the reason that the positive is not so painful as the negative, and, being the acid pole, I conceived that it would excite sufficient irritation and inflammation, and at the same time coagulate the blood in the small vessels, thereby creating a harder cicatricial or adhesive inflammation, than the negative or alkaline pole. I think the negative pole softens tissues, and will cause absorption of already formed cicatricial tissue; but in hernia we want a hard, adhesive inflammation excited, thereby effectually healing up the rings and canal. The more inflammation excited (so that it does not injure the cord or vessels, and falls short of suppuration), the more radical will be the effect. There is no foreign matter deposited, as is the case in subcutaneous injections, to form a nucleus for suppuration. The patient should lie in bed for at least two weeks, and then use a well-fitting truss for some time, until the part becomes strong and firm."

In the spring of 1884, while living in the State of Minnesota, Dr. Craft operated upon three cases of hernia. They were all of comparatively recent date, caused by straining, in lifting heavy weights or jumping from a height, and one of the common oblique type, through the external ring, although they had not descended into the scrotum. The patients are all Norwegians, and one of them returned to his native land about three months after the operation, at which time he was well, and had done ordinary work since his recovery, without any return of the trouble. The other two patients had no return of the hernia up to the end of six months, at which time Dr. Craft left the State.

Dr. Craft thus describes his method in the treatment of hemorrhoids: "In hemorrhoids I apply the positive needle also; yet in a few cases I have applied the negative, but do not get such decided cicatrizing and shrivelling up of the pile as with the positive. I select the particular pole according to the peculiarities of each individual case. If I want to absorb the pile, I insert the negative needle; but, if I desire to seal up the vessels by adhesive inflammation, I use the positive needle."

Dr. Newman then went on to speak of the successful application of electrolysis in port-wine marks, epilation, and uterine tumors. In regard to the practicability of the method in the treatment of the latter, he said there is a great diversity of opinion in the profession, and this is, no doubt, due to the fact that some such growths are amenable to electrolysis, while others are not. A variety of circumstances also always have to be taken into consideration, such as the general state of the patient and her intercurrent diseases, as well as the great difference among operators. Whoever knows the power of electrolysis, he said, will have confidence that uterine fibroids and other tumors can be cured by it. The reports from reliable observers on this point are such that the record must be accepted as true. He then referred to over one hundred cases of positive

cure which had been reported by Drs. J. N. Freeman, of Brooklyn; J. T. Everett, of Clyde, Ohio; Ménière, of Paris; and Apostoli, of Paris. The clinical experience of the latter, extending over two years, upon more than one hundred cases, had shown that the treatment constantly reduced the size of the uterus, and completely restored the patient. In conclusion, Dr. Newman spoke of the application of electrolysis to strictures of the Eustachian tube and of the œsophagus.

DR. WILLIAM H. PANCOAST, of Philadelphia, who was present by invitation, said that he had had some experience with electrolysis in the treatment of urethral strictures, but had never been perfectly satisfied with its results. He inquired of Dr. Newman whether the positive pole really caused the absorption of tissue.

DR. NEWMAN replied that electrolysis acts in different ways, according to the method employed. Weak currents cause absorption, while strong ones destroy. His own experience had been different from that of Dr. Craft as regards the comparative painfulness of the application of the two poles. Contrary to the latter, he had found that the positive pole causes more pain, acting as an acid caustic, as it does, than the negative, which acts as an alkaline caustic. He agreed with Dr. Craft, however, as to the propriety of using the positive pole in hernia, where the object is to set up adhesive inflammation. The negative pole certainly causes absorption, and this is the one to be employed in the treatment of urethral stricture. This is the one, also, which has been so successfully used in stricture of the Eustachian tube and other strictures.

DR. ROCHESTER, of Brooklyn, was of the opinion that electrolysis is an exceedingly uncertain method of treating uterine fibroids. He had some cases which had been operated upon, and which, he was told, had been greatly relieved thereby; but he had found that the tumors are still present, and that the hemorrhage caused by them still continues, so that other measures are called for. He spoke particularly of one case of multiple fibroids, complicated by ovarian trouble, also, as he believed, which was operated on by the method of electrolysis in his presence. At the end of a week or ten days the treatment was repeated, and the operator stated that the growths were much reduced in size; but, for his own part, he could not appreciate any difference, and the same was true after a considerable number of sittings. The patient, moreover, suffered great pain, and this, he thought, was probably due to localized peritonitis, induced by the application of electrolysis.

DR. GOVAN, of Stony Point, Rockland County, read the report of a

CASE OF RAILROAD ACCIDENT.

The patient was struck by a railway train, and when seen was found to be perfectly unconscious, and to have a fracture of the skull, with depression behind and above the left ear, which was caused by his head striking the ground. The patient remained unconscious for four days, and an operation for raising the depressed bone was just about to be undertaken, when it was ascertained that the bone had risen spontaneously to nearly its normal position. On the following day the depression had still further disappeared, and the patient was found to be conscious and able to speak. From this time he gradually recovered.

DR. GOVAN also read the report of a

CASE OF ANILINE POISONING.

The accident was caused by the breaking of a carboy of aniline oil which the patient was engaged in removing, and he remained in a stertorous sleep for a number of hours, while there was complete anæsthesia of the entire cutaneous surface. Under the use of aconite and tonics, he gradually improved; but three days after the accident he complained of pain in the bladder, and a hemorrhage from the latter commenced which continued for two days, when it was finally checked by the use of a solution of tannic acid in tincture of uva ursi.

THE PRESIDENT asked whether Dr. Govan attributed the general anæsthesia in the last case to the effect of the oil. The anæsthetic effect of carbolic acid is well known; but it is probably not as generally known in the profession as it deserves to be, that this agent is one of the best possible applications that can be made in cases of burns. A few years ago, attention was directed to this use of carbolic acid by Dr. Squibb, and he had recently had the opportunity of testing the efficacy of the remedy in his own person. He had quite a severe burn of the finger, which destroyed the true cuticle in one part; but the pain was almost instantly relieved by dipping it in a solution of one drachm of impure carbolic acid (containing 96 per cent. of the acid) to the quart of warm water, as suggested by Dr. Squibb. He had also used it with very happy effect in the case of a little girl, in which the burns covered a very large portion of the surface of the body.

DR. GOVAN remarked that the anæsthesia is undoubtedly due to the effect of the aniline oil, and that since he had met with this case he had used the oil very successfully for the purpose of producing local anæsthesia when laying open felons and performing other minor operations. There is absolutely no pain, even in cutting down to the bone, when the finger has first been dipped for a short time in the oil.

DR. C. S. WOOD, of New York, said that in New York at least carbolic acid had been very largely used in the treatment of burns ever since Dr. Squibb had called attention to the matter. He thought it probable that the anæsthesia in Dr. Govan's case had been caused by the oil, but that the comatose condition resulted from the inhalation of the vapor of naphtha arising from it.

DR. RUSHMORE, of Brooklyn, said that Dr. Govan's suggestion to use aniline oil when operating on felons was a most excellent one. There are other agents, such as ice and carbolic acid, which produce a sufficient amount of local anæsthesia, but the trouble with them is that their use is liable to be followed by considerable subsequent irritation.

DR. E. H. SQUIBB, of Brooklyn, remarked that the hemorrhage from the bladder in Dr. Govan's case seemed to indicate that the aniline oil was largely contaminated with carbolic acid or other byproducts of the coal-tar series, different ones of which were given off at different temperatures. It would be interesting, he thought, to note whether the peculiar effects produced in this case would result from poisoning by a specimen of perfectly pure aniline oil.

DR. PANCOAST said that generally, when local anæsthesia is resorted to, the patient suffers more or less

pain from the operation, and he was gratified to learn from Dr. Govan that when aniline oil had been used for this purpose there is absolutely no pain experienced, during the cutting of a felon, for instance. In his own practice, he said, he is in the habit of combining Bonwill's method of inducing anæsthesia by means of rapid respiration with the inhalation of a few whiffs of chloroform. Bonwill's method is not sufficient of itself, and he could not but feel that the efficacy of this procedure is largely due to its moral effect upon the patient. One great advantage of the use of general anæsthetics over local is that they not only prevent all pain, but also remove the dread of suffering, which is often an important point.

AFTERNOON SESSION.

DR. A. FLINT, of New York, read a paper entitled
SUGGESTIONS IN REGARD TO THE CAUSATION AND
TREATMENT OF ACUTE CORYZA.

Having briefly referred to the causation of acute coryza by the inhalation of gases, by powders, such as ipecacuanha, which are probably largely concerned in the production of hay-fever, by iodine, and by affections like measles, he said that it was to what is ordinarily known as a cold in the head, and the incipient stage of the affection known as influenza, that he now wished to call attention. The nostrils are first affected, constituting a rhinitis, and the fault may, perhaps, go no further; but, as a rule, it progresses to other adjacent parts, with the result of producing pharyngitis, laryngitis, or bronchitis. The use of the term catarrh, which is often employed both by the profession and the laity in speaking of coryza and the other affections named, is an antiquated error which should long ago have been given up.

The word cold, so generally in use, implies a change of conditions in which the temperature of the atmosphere is necessarily concerned; but it was his aim to show that it is highly probable that coryza does not result from any agency connected with the atmosphere, but from a specific microorganism. On what grounds is such a hypothesis based? In the first place, it is demonstrable that cold has very little to do with the causation of coryza. Among those who are especially exposed to sudden successions of high and low temperature it is rare; and the same is true as regards those who are exposed continuously for a long time to cold. In a large proportion of cases the affection can not be referred to any special exposure whatever, and experience thus furnishes very little support for the ordinarily accepted view.

As is well known, coryza often operates in a more or less general manner, more than one person being affected at a time; and this seems to indicate a specific cause. This is everywhere recognized as regards influenza, and as the latter is only a more intense manifestation of the same disorder, it is logical to infer that the same holds good in regard to ordinary colds. One fact which affords support to the parasitic hypothesis is, that in a cold the various parts of the respiratory tract are affected not simultaneously, but successively; a circumstance which is satisfactorily explained by the time it takes the microorganisms to multiply into colonies after obtaining a lodgement on the mucous membrane.

These, then, are some of the rational grounds for the probable parasitic origin of acute coryza. To establish the point with certainty it is necessary to demonstrate that a specific microorganism is always present in the affection, that it is never found in any other condition, and that it can be successfully cultivated outside of the body. It is highly desirable, therefore, that some of our competent microscopists should undertake the investigation of this subject in a thoroughly scientific manner.

In regard to the treatment of acute coryza, Dr. Flint remarked that if the existence of the parasite which he had assumed be a reality, the destruction of the latter by some suitable agent will, of course, instantly cut short an attack of the affection. This will be the general rule; in exceptional cases the parasiticide will hardly be required. He stated that he had consulted four of the latest works in which the subject of coryza is treated by authors of established reputation, viz., Cohen, Ingals, Robinson, and Bosworth, and that only one of the writers referred to the probable existence of a microorganism capable of producing the irritation of the nasal mucous membrane met with in a "cold in the head." This is Cohen, and he spoke of the parasite exclusively in connection with the subject of influenza; not referring to it at all as the possible cause of ordinary coryza. All these writers, however, favorably mention the use of topical remedies, either to excite or soothe the inflamed mucous membrane, or for antiphlogistic purposes. Dr. Flint then referred to the Brandt treatment by means of carbolic acid and ammonia inhaled from a sponge; but stated that its efficacy had not been attributed to the anti-parasitic action of the remedies employed.

He did not claim any originality, he said, in calling attention to the probable parasitic origin of acute coryza. Many years ago, Dr. J. K. Mitchell, the Moses of the modern school of etiology, who was only permitted from afar to view, but not to enter into the promised land of the scientific realization of his daring conceptions, had intimated that such was the fact in regard to this and other similar affections. Later, Sir Henry Holland, of London, and Mütter, of Vienna, had also entertained similar views.

The topical treatment so generally recommended, however, while it is not ostensibly employed for its parasiticide action will, he believed, be found in reality to derive its efficiency from its energy in this direction. Thus, among the agents so used are the permanganate of potash, salicylate of soda, the vapor of turpentine, and quinine and camphor in combination. Finally, having spoken of Helmholtz's quinine treatment of hay fever, Dr. Flint said that if a parasiticide be discovered which is constantly successful in cases of acute coryza, it will offer strong rational grounds for the correctness of the doctrine suggested.

DR. WYCKOFF, of Brooklyn, remarked that in his own cases he had derived very little benefit from Helmholtz's treatment, while he found that a great deal of irritation is caused by the insufflation of the quinine solution. The theory advanced by Dr. Flint seemed, however, to be plausible, and he trusted that the matter will be thoroughly tested by a series of laboratory investigations conducted by competent observers.

DR. E. F. BRUSH, of Mount Vernon, Westchester

County, said that he remembered reading in a Virginia medical journal, he thought, a paper in which Dr. Cutter, of Boston, claimed to have discovered the true cause of influenza in a sort of polypoid, which was probably too large in size properly to come under the term bacteria. He also found that quinine killed it. This, he believed, was the first time that influenza was referred to such an origin. He is in the habit of employing ten parts of camphor to one part of quinine, and he has found that the camphor counteracts the irritating effect of the quinine. This combination often aborts an acute attack of influenza.

DR. PANCOAST said that he had made some experiments with the Helmholtz plan of treatment, and that he had been disappointed with the results obtained. He has found cubebs and camphor in combination very efficient; but the remedy which he prefers to all others is a mixture of the tincture of myrrh and borax. He asked Dr. Flint in what way the active antiphlogistic treatment, often used in colds, such as the production of free diaphoresis, etc., is efficient if the parasitic doctrine be true, and whether this efficiency can be made to tally with the latter.

DR. FLINT replied that he did not see any inconsistency in the matter. A full dose of opium, which is always part of the antiphlogistic treatment, is very efficient in breaking up a cold, just as it is very beneficial in the incipient stages of cholera, where the parasitic origin of the disease can now be regarded as practically established. Whether the opium is directly destructive to the parasite or not, he was not prepared to say.

THE PRESIDENT remarked that the late Prof. Nathaniel Chapman, of Philadelphia, had always insisted on the special efficacy of old opium pills in acute colds, and he thought it probable that the reason why these are so useful is because in this form the effect of the opium is prolonged. In his own person he never failed to abort an attack of coryza with an old opium pill.

DR. W. MCCOLLOM, of Brooklyn, read the report of

AN OBSCURE CASE OF PULMONARY DISEASE.

The patient was a gentleman with the early history of specific disease, who had a large chest and voluminous lungs. A few months since he began to suffer from emotional excitability and from occasional paroxysms of dyspnoea. These asthmatic seizures were liable to be brought on by an unusual emotion or exercise, and as time went on they increased in frequency. A careful physical examination of the chest, however, did not detect any appreciable cardiac or pulmonary trouble. Afterward Dr. Sherwell, of Brooklyn, examined the larynx, but found no evidence whatever of any disease. He expressed the opinion that there was probably an aneurism of the arch of the aorta. Still later the patient was examined by Prof. A. Flint, who found only some subcrepitant râles on both sides of the chest. He believed that there was pulmonary œdema present, but could not say from what cause it proceeded.

In the meanwhile the dyspnoea was steadily progressive, and on the 24th of September last the patient took to bed. On the 25th he was examined by Dr. James R. Leaming, of New York, who thought that there were extensive pleuritic adhesions present, both old and new; an opinion in which he was confirmed by subsequent examinations. At this time the right lung did less work

than the left, and the respiration altogether was largely abdominal.

Death occurred on the 5th of October, 1885, and an autopsy was made forty-eight hours after death.

The kidneys were entirely free from disease, and the liver, with the exception of possibly being a little fatty, was also normal. The pericardium contained two ounces of fluid, and the right ventricle of the heart was found to be moderately dilated. Otherwise the heart was perfectly healthy. The thoracic aorta was also free from disease. The lungs were of a dark gray or brown color, and were found to float in water. The parenchymatous structure of both lungs was very hard and dense, and creaked distinctly under the knife. There was no evidence of acute pneumonia, and no cavities were found. The only adhesions discovered were two slight ones at the top of the right lung, and they were evidently very old. (Specimens of the lungs were exhibited.)

DR. FLINT said that he remembered the case perfectly well, having made some notes himself upon it. He had not heard of the patient's death before, but he was very glad to know the result of the autopsy. When he made the examination of the chest in consultation with Dr. McCollom, he could discern nothing but the presence of a moist râle on both sides. He then felt quite sure that the patient had disease of the kidneys, and requested specimens of the urine. When, however, the examination of the latter gave a negative result, he felt at a loss in regard to the case, and asked to be allowed to see the patient again.

The condition of the lungs, found after death, completely explains the progressive dyspnoea, and at the same time it serves to illustrate the inadequacy of physical signs under certain circumstances. The remarkable point about this case is the equal development of the pulmonary cirrhosis on the two sides. Almost invariably the condition is much more marked in one lung than in the other; so that the difference between the two sides of the chest is very apparent. The existence of moist râles in connection with a normal condition of the heart seemed to him positively to indicate kidney disease, and he was therefore surprised to find that the urine gave no evidence of this. On the whole, therefore, he considered it a very interesting case, and the specimens that had been presented he believed were unique. He thought it also worth while, in this connection, to call attention to the mechanism of subcrepitant râles. One observer, as the history showed, had referred these râles in the present case to the presence of pleuritic adhesions. From the result of the autopsy, however, it was pretty evident that here the subcrepitant râles were produced in the smaller bronchial tubes, and not in the pleurae.

THE PRESIDENT stated that some time since he had taken the liberty of inviting Prof. Pancoast to be present at the meeting, and that he would now call upon him to make some remarks on such topics as he might select.

DR. PANCOAST, having expressed the pleasure which it afforded him to be present on this occasion, said that he would be glad to speak on

SOME POINTS IN SURGICAL PRACTICE AND SURGICAL ANATOMY.

The first topic to which he referred was a system of

surgical treatment which had proved of great value in his hands, to which he had given the name of

The Antiphlogistic Touch of the Therapeutic Knife.

If he sees a patient early enough, this enables him to say with almost absolute certainty that there will be no abscess. Having exhibited the little knives which he is in the habit of using, he stated that the special excellence which characterizes them is, that they leave no scar. By means of one of these the part is punctured in numerous places, and the dead blood let out. The method is applicable to tumors of almost any sort, as it affords the best possible means in deep-seated bloodletting of the part. The moment a bubo, or other gathering, becomes hard and refuses to yield to the action of local applications, he freely punctures it with his little knife, and occasionally he finds that there is a drop of pus on the point. By this method he has even cured some cases of goitre, both cystic and fibroid, or at least rendered the growth so small that it gave no further trouble. He also gives internal remedies, however, such as Donovan's solution and iodide of potassium, with the addition of cinchona or whiskey, if the patient's condition seems to demand it. Many other glandular growths can also be successfully treated in the same way.

The next point was one in connection with the surgical anatomy of the face, viz.:

The Special Value of the Malar Bone,

which is often overlooked by surgeons. It is one of the hardest bones in the whole skull, and it therefore serves as a great protection; while if it can be saved, much deformity of the face is prevented. In excision of the superior maxilla, consequently, he always makes it a point to leave this bone in position; and he then proceeded to describe the operation which he had devised for this purpose. This consisted in a double-curved incision; and, after turning back the soft parts, in inserting a chain-saw through the speno-maxillary fissure, and so cutting through the articulation of the superior maxillary with the malar bone. In this connection he related the case of a lady with a rapidly growing carcinoma of the face, upon whom he performed this operation, notwithstanding the fact that she was five months pregnant. In ten days she had recovered from the operation, and she afterwards went on to full term without any further trouble. The value of the malar bone in protecting the brain from injury was well illustrated in the case of a boy, from whose face he extracted the breech-pin of a gun which had been embedded in it, without any one's knowledge, for eleven months. The gun had exploded in his hands, knocking the boy senseless, and the breech-pin had buried itself so completely in the tissues that it was not discovered by the physician who attended him. This case taught us that under such circumstances we should always examine carefully for powder in the skin, and also make sure that some part of the gun has not been embedded in the face. Although this would seem like a very extraordinary case, it was not unique; similar ones having been reported by the late Dr. John R. Barton, and by a surgeon to one of the ophthalmic hospitals.

DR. PANCOAST next made a report of his

Treatment of Varicocele,

which he said he has now successfully practised in over four hundred cases since the year 1856. It is very simple, and, therefore, in marked contrast to that so much in vogue in New York, and advocated particularly by Dr. Henry, which involves the cutting away of a portion of the scrotum. He did not think the latter a philosophical procedure, because it simply shortens the bag in which the enlarged veins are contained, and this can be more efficiently done by suspending them in a muslin bag, because the latter is indistensible, while the shortened scrotum, consisting of elastic tissues, gradually stretches more and more, so that the trouble eventually returns. This procedure does not, therefore, go to the root of the evil. Still more complicated and serious is the operation described by Mr. Lee, in the *Lancet* of April 18, 1885, in which he cuts open the scrotum and lifts out the veins of the spermatic cord. In both these operations there is no little danger of erysipelas setting in. In his own operation the patient is cured in three or four days, instead of as many weeks. It consists of transfixing the scrotum with a sail-maker's needle (which has a good point, but no sharp edges), and passing between the vas deferens and the veins a strong silk ligature, which, having been carried around the veins, is then brought out at the point of insertion. The ends of the ligature are then tightly secured over a button of German silver or zinc, and the veins being thus strangulated, the ulcerative process goes on rapidly. In

Stricture of the Urethra

he has never yet failed to get into the bladder with the instrument which he had modelled after that of Mr. Syme. After passing the filiform bougie through the staff, the latter is pushed up to the point of stricture, which is then cut superficially at a variety of points. The urethrotome is so constructed that the knife can be made to cut as deeply or as superficially as desired. Afterwards steady and progressive dilatation is to be regularly practised, and this, he insisted, is the only method of successfully treating stricture. Dr. Pancoast also exhibited and explained the *modus operandi* of a very light catheter bougie, with olive-shaped extremity, which he has devised.

He next spoke of

The Advantages of Sutures of Pure Black Silk,

and he said that he always keeps a variety of sizes on hand. The white silk commonly used is colored with lead, and is apt to be poisonous to the wound, but the black silk causes no suppuration. The sutures which he uses are antiseptic, being made of pure black silk which is dyed with iron. The latter circumstance, he thought, is of service in preventing erysipelas. The silk can be rendered more antiseptic by dipping it in carbolic acid or chloride of zinc, of which he has a very high opinion. It is the strongest ligature made, and at the same time the most delicate for plastic operations. He is also in the habit of using diachylon plaster made with black silk, and finds it extremely satisfactory.

He then went on to speak of a point in surgical anatomy concerned in

Ununited Fractures of the Bones of the Leg and Forearm.

It is sometimes found that where one of the two bones in either part is broken, the fracture will not unite, notwithstanding the most skilful efforts on the part of the surgeon. The reason is, that the sound bone keeps the fragments of the broken one apart, and he has found that after fracturing this one also, there is generally no further trouble. In illustration of this point, he related a very interesting case of ununited fracture of the tibia, which was very aggravated and of very long standing, and in which the result, after he had fractured the fibula, to enable the fragments to come together, was quite remarkable.

The concluding portion of Dr. Pancoast's remarks was devoted to the consideration of *fracture of the neck of the femur in the aged* (in which he said he obtained excellent results by the use of a triple-inclined plane, the apparatus being modelled after the Charleston chair); of disease of the joints (in which he spoke of the advantages of rest); of an operation of his father's for incurvation of the penis, consisting of the removal of the V-shaped piece behind the glans, from the cavernous bodies; of the treatment of fistula in ano by the antiseptic ligature; of the subcutaneous incision of partially strangulated hernia; and of the desirability of treating chancres by the method of complete excision. He also exhibited specimens showing the results of exsections of the shoulder and of the hip, with the development of remarkable reparative processes.

On motion of Dr. Garrish, a vote of thanks was tendered Dr. Pancoast for his instructive address.

DR. J. W. S. GOULEY, of New York, discussed some of the points referred to by Dr. Pancoast. The method of punctures, for the control of inflammatory processes, he said, was a very old one. It began with acupuncture, and had been practised in various forms for the last eighty years. Thus, Velpeau used to make forty or fifty punctures sometimes in cases of orchitis. The principle is excellent; but there is nothing new about it. Having spoken of the operation of the late Dr. Charles E. Isaacs, for the removal of the superior maxilla by means of a heavy pair of forceps which he had devised, Dr. Gouley took up the subject of urethral stricture, and said that he was not in favor of multiple incisions. Only a scarification is possible, he thought, with the instrument which Dr. Pancoast had exhibited, and in his experience scarification had proved valueless. Instead of one, Dr. Pancoast left a number of cicatrices; but it was his opinion that the correct method of performing internal urethrotomy is to make one deep incision, so as to have but one cicatrix, and to make it in the floor of the urethra. This allows Nature to put in what he termed her splice of cicatricial tissue, and the operation of urethrotomy is only the beginning of the treatment of the stricture, since no stricture is cured by incision alone. This plasmatic material becomes slowly organized, and then dilatation is to be commenced. This is to be kept up not for months, but for years. As to metallic catheters, it is not once in five hundred times that he ever has any occasion to use one. If he does resort to a metallic instrument, however, he wants it very heavy, so that

it will make its way into the bladder itself, and not of the light character of Dr. Pancoast's, with which he thought an inexperienced hand could do much harm. He objected to the olive-shaped extremity (which may be convenient in a soft instrument), on the ground that it is liable to make false routes, because it is three or four sizes smaller than the diameter of the shaft. Another objection to the instrument (which, however, is one that applies to a very large number of catheters) is that it has two eyes. One eye causes quite sufficient irritation, and there is no use whatever in having two. Finally, Dr. Gouley criticised Dr. Pancoast's operation for incurvation of the penis, and stated that he had performed with success an operation just the opposite of this, in which there was a longitudinal incision.

DR. GARRISH inquired whether cases of goitre were really cured by the simple method of small incisions; to which Dr. Pancoast replied that the goitre became reduced to such a size as to give no further trouble. In addition to the incisions and the internal treatment which he had mentioned, he is in the habit also of keeping up pressure by means of a rubber bandage. In reply to Dr. Gouley, he said that he did not mean to claim anything new in regard to the antiphlogistic touch, which, he was well aware, had been practised for a long time. He had, however, invented a knife by means of which the method could be employed to the best possible advantage, since it makes a suitable puncture, and nothing more. There is no incision and no scar, and the inflammation is satisfactorily relieved by it.

DR. NEWMAN said that the difference between Dr. Pancoast's method and others was, that his little knife produces no cut; and a cut, even with a sharp-pointed bistoury, will leave a scar. He had seen Dr. Pancoast use this knife in the case of delicate young ladies suffering from acne, and it left no scar or other after-effects, on account of its peculiar shape. In regard to varicocele, he had been successful in a number of cases with an appropriate truss; but it is exceedingly difficult to get an instrument maker to construct the appliance properly.

THE PRESIDENT said it was Sir Astley Cooper who first performed the operation of removing a portion of the scrotum in varicocele. Personally, he had been in the habit of resorting to the same procedure as Dr. Pancoast; but he had generally used iron wire instead of the silk ligature. It seemed to him now, however, that the latter is preferable, especially since the antiseptic properties of black silk have been shown, and in the future he will employ this. Occasionally he had known the iron wire to cause irritation, so that it had to be removed.

DR. PANCOAST then went on to reply to Dr. Gouley. In his urethrotome the knife is so arranged to cut just as deeply or superficially as the operator desires. For himself, he prefers a number of small cicatrices to one large one. He agreed with Dr. Gouley, that steady dilatation is absolutely essential for a cure, and that the cutting of the stricture is only the first stage in the process. In regard to his catheter-bougie, it is not true that the olive-shaped extremity pushes its way along the urethra. On the contrary, it has to be pushed in, and the main shaft of the instrument, which made its way along the urethra, always keeps its path in the

centre of the canal. It serves a useful purpose in preventing the mucous membrane from puckering up. In speaking of incurvation of the penis, he claimed that Dr. Gouley was wrong in his anatomy, since the corpus spongiosum belongs to the glans.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 15, 1885.

THE PRESIDENT, A. JACOBI, M.D., IN THE CHAIR.

DR. A. B. JUDSON, Secretary, reported that the

SURGICAL SECTION

of the Academy had been reorganized at a meeting held on October 12, and that it had been decided to hold the regular meetings of the Section on the second Monday of each month. Dr. Stephen Smith was elected *Chairman* of the Section, and Dr. A. B. Judson, *Secretary*. A detailed report of the first meeting was presented. The President announced that a

SECTION ON OPHTHALMOLOGY AND OTOLOGY

would be formed during the coming week.

DR. F. A. CARTH, from the Board of Trustees, reported that \$2000 had recently been paid, which constituted the final payment in liquidation of the original mortgage of \$10,000 on the building, so that the Academy is now entirely

FREE FROM DEBT.

DR. STEPHEN SMITH read a paper on

THE COMPARATIVE RESULTS OF OPERATIONS IN BELLEVUE HOSPITAL.

There is probably no better place, he said, in which to test the progress of practical and operative surgery than the wards of this hospital, which has within its walls and immediate environments all the conditions that in modern times are regarded as unhealthful and unsanitary. It was built between the years of 1811 and 1816, on the made lands of a cove of the East River, without drainage or adequate sewerage, and without regard to ventilation; while before its occupation as a hospital it had been used both as a prison and an almshouse. Its wards had, from time to time, been crowded with patients suffering from typhus and typhoid fevers, smallpox, puerperal fever, cholera, and yellow fever, and although many changes had been made in its interior, yet the great and most serious defects of location and construction had remained unaltered, and might be regarded as permanent.

Bellevue can be regarded as a surgical hospital only since 1850, and during that period the amount of surgery in its wards has been gradually increasing. The surgeons of this institution have always ranked among the best in the city, and yet the practice of surgery has, within the period mentioned, undergone so complete a revolution that one of the older surgeons would scarcely realize that he was in the same hospital where he had practised a decade ago.

He would see with horror, said Dr. Smith, operations fearlessly performed that he had formerly regarded as without the pale of legitimate surgery. He would witness procedures in the after-treatment of operations

which would seem to him to be fantastic, and even ludicrous. His astonishment would be extreme on finding that the first week passed without fever, and that no change in the dressing had been made. But, perhaps the most remarkable feature of modern practice would be the rapid convalescence and final complete recovery, without complication or exhaustion, of ordinary operations, which formerly gave so much trouble and anxiety.

To make more evident the change in practice, Dr. Smith proceeded to contrast in detail the several steps of operations in general, and of individual cases, the methods of treatment, and the results. Having mentioned that before the use of anesthetics the most important general principle governing the operator was celerity, in order to limit as much as possible the amount of pain, he said that now one thought and purpose occupied the mind of the surgeon, and that is, recovery without suppuration. Instruments are not only protected from rust and all soiling and kept sharp, but long before the operation they are placed in a carbolic solution, in order that any possible septic matter on them, or their handles, will be destroyed; and during the operation one assistant devotes himself entirely to the duty of handing the instruments to the operator, and of receiving them from him, and at once submerging them in the disinfectant fluid.

He first took up the performance of operations, such as amputations, for instance, describing the methods by which absolute cleanliness is now secured, in contrast to the former practice, when in the simple failure to secure ordinary cleanliness of the surface wounds were more frequently poisoned and induced to suppurate than from any other cause. In speaking of ligatures he said: Recognizing the silk ligature as an irritant, the surgeon always used to cut off but one end, and left the other depending from the wound, to be removed by traction when it had finally separated from the end of the vessel to which it had been applied. And well and faithfully did the ligature meet its indications, for during the first week, the most critical period in the history of the wound, it did not fail to induce free, and often profuse, suppuration. But now, not only does the surgeon freely apply the ligature, but he cuts off both ends, and closes the wound as completely as if there was no foreign substance left between its surfaces. No suppuration follows the presence of the ligatures, and union takes place as promptly as if no ligatures had been used.

Having referred to the past and present methods of closing wounds and of after-treatment, Dr. Smith went on to say that if we followed the wounds treated by these two methods from the first to the last dressings, the contrast was remarkable. If the wound was large, fever formerly began on the second or third day, announcing suppuration, and from this date, for weeks after, the dressings were changed daily, one, two, or three times. The pus-basin, the irrigator, and the dressing forceps were in constant demand, and in many wounds the suppuration was so profuse that vessels were placed under them which received the continuous discharge. The fever generally ran high, with consequent exhaustion and depression of the patient. Septicæmia, as now understood, was the intermediary fever of that day, and was regarded as a usual, if not a necessary, sequel of

all considerable operations. Following this fever, or rather insidiously engrafted upon it, were chills, fever and profuse sweatings, now recognized as pyæmia, but then regarded as only another step of surgical fever. Few indeed survived this fever; and in the diffused or metastatic abscesses revealed at the autopsy the surgeon discovered a cause of death quite beyond his power to prevent, control, or even comprehend.

The vast change in the progress of operated cases during the past ten years could scarcely be realized. Surgical fever, with all its disastrous variations, is, in practice, rare now in Bellevue Hospital. Pus, as an outcome of surgical operations, is a thing of the past. On one occasion, Dr. Smith said, a teacher in one of the medical colleges sent to the wards of Bellevue for a specimen of pus for exhibition to his class; but none was found in the four surgical divisions of the hospital, although there was at that time an unusually large number of wounds and operated cases under active treatment. The wound is now dressed with no expectation that fever will arise, that suppuration will occur, or that the dressings will require renewal on account of the presence of pus. The patient sleeps and eats well from the first, and the surgeon often removes the dressing only to find the wound united; a condition of affairs which is true not only of incised wounds but equally of wounds of amputations, excision, ligation of arteries, etc.

Turning from this review of the several stages of operations in general to particular operations, he said that many curious illustrations of the remarkable progress of practical surgery in this hospital are to be found; in proof of which he cited the treatment of compound fractures, in which amputation is now never thought of unless arteries and nerves are so far destroyed that death of the extremity must follow amputations, excision of the larger joints, and ligation of large arteries. In speaking of amputations, he said that an interne once made the statement that "a recovery after amputation of thigh had not occurred in Bellevue Hospital since the time that the memory of man runneth not to the contrary," a remark which, although not strictly true, had a painful significance to the surgeons of that period.

If the major operations are now performed with so much success, Dr. Smith went on to say, it follows that the minor ones are correspondingly successful; a good instance of which is afforded in the improvement in the treatment of cold abscesses. Perhaps the most marked illustration of the great improvement in operating surgery, however, is to be found in the unvarying success which attends the treatment of simple fracture of the patella, by wiring together the fragments; a procedure which embodies the very spirit and genius of the surgery of to-day, viz.: Boldness and audacity in the conception of an operation, and conservatism in the most absolute in the methods and means employed in executing it. This operation is now accepted as legitimate, and no procedure, so inherently dangerous when performed according to old methods, has ever proved more successful.

After briefly referring to the success attending gynecological operations in this hospital, Dr. Smith concluded in the following language: In reviewing the surgical practice at Bellevue, it is not difficult to determine the essential feature of the present methods as compared with those of the past. Cleanliness is the one great

object sought to be obtained in all operations. Whatever may be the final conclusions of scientific students as to the cause of putrefaction of wounds, practically, it is determined that the surgeon may, with the most absolute certainty, protect an ordinary open wound from suppuration. To effect this object, he finds that he has simply to resort to those measures which are known to secure perfect cleanliness of the wound. The agents now relied upon and found efficient are: 1. Soap and water to external parts. 2. Carbolic solutions for the instruments. 3. Bichloride solutions to all surfaces and tissues. 4. Iodoform for external dressings. We may summarize the conditions regarded as essential to success as follows, viz.: A clean operator, clean assistants, a clean patient, clean instruments, and clean dressings.

DR. ALFRED C. POST said that he could cordially endorse the sentiments expressed by Dr. Smith, more especially in regard to the matter of thorough cleanliness. He thought there is still some room for question as to how far antiseptics, so-called, contribute to the admirable results which are now obtained in surgical practice. The great point he believed to be, perfect cleanliness, and the seclusion of the wound from malign influences from without. His doubt as to the value of antiseptics had its origin in the reported experience of the renowned gynecological surgeons of Great Britain, such as Lawson Tait and Dr. Thomas Keith, who had discarded their use. They trust entirely to thorough cleanliness and had even expressed the opinion that antiseptics add slightly to the mortality of such operations as they are accustomed to perform. It is to be noticed, however, that these surgeons are always careful to have their sponges and ligatures treated with antiseptic solutions beforehand. Still, they do not cleanse their hands with antiseptics, and apply no antiseptic dressing after their operations. Personally, Dr. Post said, he is somewhat disposed to believe in the efficacy of antiseptics, but at the same time he felt a little staggered by the extraordinary success of the surgeons referred to, without them. The success of Spencer Wells, who still employs antiseptics, is not as great as that of Lawson Tait and Dr. Keith. But, at all events, whatever the name, the fact remains that the improvement in surgical practice has been very marked.

DR. W. GILL WYLIE stated that until three or four years ago ovariectomy was not performed at all in Bellevue Hospital, on account of the extreme mortality attending the operation there. When he was an interne in the hospital, in 1870, Listerism was just beginning to find its way there. It has, at all events, taught us the lesson of perfect cleanliness; and he thought it somewhat doubtful whether we should ever have learned this lesson had it not been for the labors of Mr. Lister. He differed from Dr. Post in believing that antiseptics are themselves beneficial, although their employment may have been carried to excess. It must not be forgotten that every one who employs coverings of cotton-wool, which is one of the best agents that we possess for protecting parts from deleterious influences, is, in fact, using a Lister dressing. Tait and Keith, on account of the extraordinary cleanliness which they practise, may not require antiseptics; but should their hands become contaminated in performing operations, or autopsies, he thought that they would not hesi-

tate to use them on their own persons, as occasion demanded. For himself, he made use of antiseptics simply as a supplementary measure; and if he was certain that he could secure absolute cleanliness without their assistance he would not employ them either. But all surgeons engaged in active practice are liable to contamination, and therefore he thought is much safer not to dispense with antiseptics. Tait's recent statements in regard to these agents are simply an expression of the present reaction against them, and he thought they are likely to do much mischief in rendering surgeons careless, so that they will not adopt those measures of extreme cleanliness which are essential to the highest success in practice.

Dr. Wylie said, in conclusion, that when he came out of Bellevue, after his service as an interne in its wards, he was of the opinion that the whole place ought to be pulled down; but now, although there is certainly much to be desired about the arrangements of the building, he is convinced that, with the methods at present in vogue, the most excellent results can be obtained there. It is a great injustice to Lister to cry down antiseptics, as we never knew what cleanliness was until he taught us.

Dr. F. V. WHITE said he would like to inquire of Dr. Smith whether he was accustomed to get bony or ligamentous union in treating fractures of the patella with the method and under the favorable circumstances which he had described.

Dr. WESLEY M. CARPENTER remarked that the various points of Dr. Smith's paper had passed before his mind like a very pleasant panorama. He had begun to frequent the wards and dead-house of Bellevue about twelve years ago, and was perfectly familiar with the history so graphically related this evening. What struck him particularly, in looking back over three years, was the absence at the present day from the dead-house of the hospital of those grave internal lesions, such as surgical kidney, which used to be so common in those dying in the surgical wards. There was certainly a remarkable and most gratifying change in this respect, and, so far as he was able to recollect, he had not seen a case of surgical kidney there for five or six years. Such pathological conditions are now virtually a thing of the past. Again, in former times autopsies in cases in which death resulted from surgical operations were very frequent; but this is no longer the case, and all these happy results have, as all know, followed upon the adoption of what is known as antiseptic surgery.

Dr. SMITH, in closing the discussion, remarked that he did not intend in his paper to discuss antiseptics or any theories respecting them. It is his own impression, however, that the improvement in surgical practice which he had described are due simply to the securing of extreme cleanliness. In the first place, the condition of the surgeon, the assistants, the nurses, the instruments, etc., is carefully looked after. Especially is attention paid to the nails, which were formerly one of the most frequent sources of contamination. In the second place, the parts are always washed until they are thoroughly clean; and not only the parts in the immediate vicinity of the wound or operation, but, in fact, the entire person of the patient. The share that can be claimed for mere antiseptics in the good re-

sults noted is probably very slight; but, at the same time, they serve a most excellent purpose in stimulating us to the carrying out of these measures of perfect cleanliness. Those, therefore, who are now ridiculing antiseptics he believed to be doing great mischief. Mr. Tait had made the statement that carbolic acid never comes near his patients; but he had met with a patient of that surgeon's who had informed him that in his actual practice he does not discard antiseptics so completely as he would have us believe, and that the minutest care is always observed in regard to his ligatures, sponges, instruments, etc. If, however, the present cry be kept up against antiseptics, great carelessness is sure to ensue, especially on the part of those who have always been opposed to their use, and, in consequence, very bad results will once more be seen in surgical practice.

In reply to Dr. White's question, Dr. Smith said that he did not know whether bony union is secured in fracture of the patella or not. The results are very satisfactory, however, and so he thought that there must be either bony union, or else extremely firm fibrous union.

A TRIENNIAL PRIZE IN MEMORY OF THE LATE
DR. ERNST KRACKOWIZER.

THE SECRETARY read the following communication:

NEW YORK, October 14, 1885.

To the Academy of Medicine.

12 West Thirty-first Street, New York:

At a meeting of physicians and laymen, friends of the late Dr. Ernst Krackowizer, who died September 23, 1875, held October 13, 1885, the following preamble and resolutions were unanimously adopted:

Whereas, During his long activity in New York City, Dr. Ernst Krackowizer rendered eminent services to both the city and the medical profession; and,

Whereas, It is both desirable and proper to preserve the memory of this great man in the history of the city and the medical profession; and,

Whereas, Dr. Ernst Krackowizer was, during all his professional life, a zealous and self-sacrificing Fellow of the New York Academy of Medicine, which never had a more enlightened, learned, and generous friend than he; therefore be it

Resolved, That the sum of eleven hundred and fifty-five dollars be transferred to the New York Academy of Medicine, upon the following conditions:

First. That the accumulated interest of the above sum be utilized, every three years, as a prize for a good, or the best, paper, essay, or book, on a medical topic.

Second. That the above sum be forever registered and carried on the returns of the property of the New York Academy of Medicine as the "Ernst Krackowizer Prize Fund;" and,

Third. That at the proper times the prize questions, essays, or books, and rewards, be published in the principal medical journals of the United States.

Resolved, Further, that it shall be left to the wisdom of the Council of the Academy of Medicine to determine whether the prize is to be awarded as a recognition of either the best literary medical production of America during the previous three years, or of the most satisfactory solution of a question or problem proposed for competition.

Resolved, Finally, that the President and Corresponding Secretary of the New York Academy of Medicine, and the Presidents of the College of Physicians and Surgeons, the University Medical College, and the Bellevue Hospital Medical College, officiating at the time of the several awards, shall constitute the Prize Committee, unless the Academy of Medicine, or its Council, decide differently.

On motion, the gift was accepted, and the matter referred to the Council of the Academy with power.

CHICAGO GYNECOLOGICAL SOCIETY.

Stated Meeting, September 18, 1885.

THE PRESIDENT, H. P. MERRIMAN, M.D.,
IN THE CHAIR.

Dr. E. C. DUDLEY made some informal remarks relative to his observations in

GYNECOLOGICAL AND ABDOMINAL SURGERY IN EUROPE during a summer holiday. His observations were confined to the work of a few operators in England, Scotland, and Heidelberg.

In Heidelberg, he called upon Professor Kehrer, and inspected the hospital and saw evidence of considerable work in abdominal surgery. Professor Kehrer's laboratory gave evidence of active research into gynecological bacteriology. His work bore the stamp of thoroughness and efficiency.

Dr. Dudley saw Dr. Bantock operate at the Samaritan Hospital London. The first operation was the removal of a small, solid ovarian tumor. The remaining ovary and tube, although normal, were removed on account of a small intramural, uterine fibroid. The striking feature of the operation was great rapidity without haste. Dr. Bantock caught up the edges of the peritoneum with small compression forceps, so that these edges were drawn up toward the cutaneous edges, and were held in this position by the weight of the instrument against the abdominal surface. This manoeuvre greatly facilitated the passage of the sutures. The pedicle was secured by means of silk ligatures, applied in the operator's peculiar figure-of-eight turns. In closing the wound, a needle of ovoid shape, curved on the edge, instead of on the flat, was employed. This needle combines the maximum of strength with the minimum of size. Two or three sutures were passed through at each angle of the wound. Their ends were joined by knots. An assistant, passing the index-finger of each hand through the loops thus formed, made traction at each angle of the wound, in such a manner as to draw its sides into contact, and to lift the peritoneal edges nearer to the surface. The introduction of the remaining sutures was in this manner greatly facilitated. The sutures were so closely passed that no superficial stitches were required. They were made to include a very narrow margin of skin and peritoneum, and very little if any muscular tissue. Fine silkworm gut was employed.

The ends of the sutures, on each side of the wound, were now grasped in lock forceps, which prevented them from being drawn out, or becoming tangled during the separation of the wound from the toilet of the peritoneum, which was most thorough, the entire cavity

being rendered perfectly clean and dry. The lock forceps were then removed from the ends of the sutures, and the hands of the assistant substituted. Traction was then made on all the sutures, in the direction of the upper angle of the wound, and they were tied in order from below upward and cut short. This prevents tangling of the threads and otherwise facilitates tying. Antiseptics, throughout the operation, were conspicuous by their absence. The dressings were of the most simple character.

Dr. Dudley then visited Birmingham, and saw Mr. Lawson Tait operate.

His rapid method of operating conveys to the casual observer the idea of haste and almost of carelessness. But closer observation very soon shows him to be one of those rare operators in whom dexterity amounts almost to a sleight of hand. An ovariectomy, in his hands, does not impress the observer as a capital operation. It seems almost as trivial as opening an abscess. His methods of operating do not materially differ from those of Dr. Bantock. In closing the wound he used but one needle, threaded with a piece of long silk, introducing this as if for a continuous suture, but did not draw the thread tight. After the introduction of the needle, he left a long loop before the reintroduction. Then, after taking the last stitch, he lifted the free loops of silk on the index-finger, and severed them with the scissors, thereby converting the continuous into an interrupted suture. These were tied in the ordinary way, and the wound was dressed in a manner which would be eminently acceptable to his most bitter antiseptic enemy.

During a brief visit in Edinburgh, Dr. Dudley saw Dr. Skene Keith perform his forty-eighth ovariectomy. Up to this time, he had lost only one or two patients. His operation presented some interesting peculiarities. He used probe-pointed scissors of a peculiar pattern, instead of the director, in going down through the deeper layers of the abdominal walls. By pressing firmly against the adhesions with a sponge, at the point of their attachment to the cyst, he literally sponged them away from the tumor. It was surprising to note the facility with which rather firm adhesions were thus broken. It is much easier to tear them from the tumor with the sponge than to tear the tumor from the adhesions. The breaking of the adhesions in this way is also much more gentle, and, in the opinion of Dr. Keith, diminishes the danger of shock. The adhesions were ligatured with fine catgut as fast as they were divided. In passing the ligatures a forceps, similar to the ordinary compression forceps, was used. This instrument had blades more than an inch long, of very small diameter, terminating in sharp points, so sharp that when the blades were closed they could be thrust through any soft tissue like a large needle. Grasping the ligature in the point of these blades, the tissue to be ligatured was transfixed. The ligature was then pulled through and the forceps withdrawn. The pedicle was transfixed and ligatured, with fine silk, in the same way.

The cautery, to which much of the elder Keith's success has been attributed, was not employed in this case, because the pedicle was very slender. The reason why the cautery, in the hands of other operators, has not proved a more perfect protection against hemorrhage, becomes apparent to any one who has witnessed its ap-

plication in the hands of Dr. Keith. The whole secret of his method is, first, in the powerful compression of the pedicle between the broad blades of a heavy Baker-Brown clamp; second in the prolonged application of the red-hot cautery iron, not only to the pedicle, but, after this has been burned to the level of the clamp, also to the clamp itself. In this way the clamp becomes so hot that the included portion of the pedicle is slowly and thoroughly cooked, so that when the instrument is removed the end of the pedicle is thin and translucent, resembling a horny substance. Such a pedicle, in the experience of Dr. Keith, never gives trouble from oozing.

The wound was closed with fine silk sutures which had been boiled. Ten or fifteen pieces of silk were threaded at each end with very fine, well-tempered needles nearly three inches long, which were introduced on either side from within outward. Very small margins of peritoneum and skin were included in the sutures. Dr. Keith thought it a very common fault among operators to draw the stitches too tight in tying. The long fine needle used in closing the wound is superior. It makes a very small puncture, which never bleeds, and is so fine that it is easily pushed through by means of finger and thumb without needle forceps.

The wonderful success without antiseptics recorded by the great Scotch ovariologist, Dr. Bantock, and by Mr. Tait, who have reduced the mortality to a very low degree, must have great influence in fixing the value of Listerism so far as it relates to abdominal surgery. At any rate, incompetent operators can no longer venture with impunity upon these capital operations under the dangerous impression, that in some mysterious way antiseptics will deprive a crude surgical performance of its greatest perils. Evidently it was not so much a question of Listerism as of removing the tumor with the least possible amount of operating, and in the shortest time consistent with careful attention to detail, and in the most gentle manner.

Dr. Dudley, however, raised the pertinent question whether Listerism should be placed on trial before a court of abdominal surgeons, and whether, if found unnecessary in peritoneal surgery, it would be fair to condemn it in general. He thought that such a verdict can not be sustained by the facts, but that the antiseptic principle in surgery is destined to stand. Even the most violent opponents of antiseptics agree that perfect cleanliness is essential. He knew of no other method by which cleanliness can be rendered so nearly absolute. Nor does the seeming ability of two or three of the most dextrous operators to do without antiseptics prove that it is not a useful aid to others. Clearly, the man who removes a tumor with the least operating and handling of the parts will require fewer preventive measures against inflammation and sepsis. Antiseptics, therefore, are most valuable for an inexperienced operator, and, to say the least, an additional safeguard for any one.

Some American operators are now having about as good results as can be shown in Great Britain, which seem to indicate that our former high mortality in this American operation has been due in reality to bad operating, and not, as many supposed, to climatic causes.

PROF. CHRISTIAN FENGER replied to the question, raised by Dr. Dudley, that antiseptic precautions may

be more important in surgery, in general, than in abdominal surgery, where it looks as though more perfect methods of operating without antiseptics give as good results as with antiseptics, as follows:

He thought that the abdominal, or rather peritoneal cavity, in respect to the antiseptic precautions, occupies a peculiar position in surgery. The danger from absorption of the poisonous antiseptics is far greater in the abdomen than in wounds. The ability of the peritoneum to absorb serous fluid and blood before it decomposes, to encapsulate foreign substances not capable of absorption—*ex. gr.*, rubber ligature—is perhaps somewhat greater than the ability of a wound in that direction, although it may be that there is some prejudice about this, as we have not as yet used silk ligatures extensively in general surgery.

As to the question, whether more perfect methods of operating without antiseptics will improve the results, or rather prevent inflammation and sepsis, he could say that outside of the peritoneum this question must as yet be answered in the negative.

In 1873, Volkmann, of Halle, introduced the Lister method of dressing and operating in his surgical clinics. In his report of the work done in 1873 (*Beiträge zur Chirurgie*, 1875), antiseptic surgery had reduced inflammatory and septic complications following excisions, amputations, fresh penetrating articular wounds, fresh open fractures, to a minimum never before dreamt of, and all this in one year. In the broad field of surgery it is not possible that Volkmann or anybody else could improve the *technique* of operating, to the extent of having the results change all of a sudden in that way. No surgeon would dare, to-day, to excise, for example, a knee-joint, without antiseptic precautions in all the minute details, even if he employed all the latest improvements in the method of operating. Abdominal surgery is the only branch of surgery in which, as yet, the heavy operating has been done without antiseptic precautions.

CORRESPONDENCE.

CHOLECYSTOTOMY.

To the Editor of THE MEDICAL NEWS.

SIR: In your issue of August 22d you quote from a paper by M. Thiriari, in which it is stated that "the operation proposed by Mr. Lawson Tait is attended by the inconvenience of leaving a biliary fistula, a condition not free from danger."

I do not know who M. Thiriari is, but it is inconceivable how he has managed to make such a misstatement. The operation leaves a biliary fistula just so long as lithotomy leaves a urinary fistula—that is, until the wound heals, and this generally occurs in twenty days unless some stone, undiscovered at the time of operation, has been left. If this has happened, the non-closure of the wound speedily proves it, the stone is removed and the wound heals. This is what I have published more than once, and this is my uniform experience, but M. Thiriari would make it appear that the fistula is a permanent result of the operation.

I am, etc.,

LAWSON TAIT.

BIRMINGHAM, October 2, 1885.

MEDICINE IN CHINA.

To the Editor of THE MEDICAL NEWS.

SIR: In reading your article of to-day under this caption, I was disappointed in not finding some reference to the Chinese treatment of syphilis, a disease which, I am credibly informed, they are very skilful in curing.

Parties who have contracted this disease on the Pacific slope where the Chinese element is numerous, have told me that, after undergoing a protracted mercurial course and subsequently the mixed treatment, only to find that the disease had not entirely yielded, they were advised to consult a Chinese physician, who cured them in a week or two. My informants were not able to tell what medicinal agents were used in accomplishing this result, only that they consisted entirely of herbs. Little bits of branches or twigs were deftly arranged together, about the length of an ordinary candle. The patient was advised to light one end of this and go to bed, and allow it to burn, to the extent of about one-third of its length, under the blanket which is covered over the patient's head. He was enjoined to breathe the smoke resulting from this, and he said that it nearly killed him. It caused the most profuse diaphoresis, intense dyspnoea, and utter prostration. This procedure was repeated three or four times, and from that day to this, a period of fourteen years, no symptoms of the disease have manifested themselves in the case to which I refer. I am not sure but that some herbs were given in an infusion, for the patient to drink in conjunction with the inhalation process.

Judging from the character and habits of the Chinese in California, and from the great prevalence of the disease amongst them there, I am led to suppose that syphilis is widespread in China. If this be the case, it is quite probable that the ingenious Chinese mind has evolved some mode of treatment of this disease which has not come to our knowledge. If this be the case, let us have all the information procurable on the subject, no matter if obtained from the "Heathen Chinese."

Yours respectfully,
H. J. MURPHY, M.D.

CHATHAM, ONTARIO, October 17, 1885.

NEW INVENTIONS.

A NEW COMEDO EXTRACTOR.¹

BY ROBERT B. MORISON, M.D.,
OF BALTIMORE.

THE extractor consists of a handle of steel, which has two arms extending from it. At the end of each arm is

being pushed, runs through the cup, in which there is a slit cut to receive it. It projects beyond the outside surface of the cup about the eighth of an inch, and is guided by a slot which works upon a pin upon the arm of the instrument, and is removable for sharpening and cleansing.

The advantages of the instrument over others of its kind are the slight indentation made by the cup upon the skin; the chance it gives one of watching the comedo as it is extracted, thereby regulating the necessary pressure; the possibility of using a knife and pressure at the same time without changing instruments, and the difference in size of the holes in each cup.

The accompanying figure, of normal size, shows the instrument without further explanation.

It was made for me by Arnold & Son, of 15 Hopkins Place, Baltimore, to whom my thanks are due for elaboration of details.

NEWS ITEMS.

NEW YORK.

(From our Special Correspondent.)

POISONED BEER.—The zeal displayed by one Bureau of the Health Department, that which deals with food adulterations, etc., has more than once been expressed in a way to excite ridicule. A recent sensational paragraph in the *Herald*, headed "Poisoned Beer," details the discoveries of Dr. Cyrus Edson and his coadjutors of metallic impregnation from contact with the pipes. Yet it furthermore declares that, owing to the excess of organic matter, no copper or other salts could be found. To those who daily use Fehling's test, this new scientific truth will be a novelty.

SMALLPOX.—Notwithstanding the terrible ravages of smallpox in Montreal, there has been very little of the disease here. The admirable system of limiting vaccination, instituted during the outbreak of 1873 by the New York Board, has been rigorously adhered to, and our safety is due to this.

MENTHOL has been extensively used in this city as a remedy for hay fever, and with some success.

WASHINGTON.

(From our Special Correspondent.)

PRECAUTIONS AGAINST THE INTRODUCTION OF SMALLPOX.—Inspection stations have been established by the Marine-Hospital Service at the towns lying on the Canadian border of the States of Maine, Vermont, and New York. The States of New Hampshire and Michigan are maintaining their own inspection stations at present,



a small steel cup, with highly polished outside surface, the bottom of which is pierced by a small hole. The cups are bent at an angle of 45 degrees. On one arm there is a small knife, made like a dagger, which, by

the State of Michigan having an appropriation which became available on the 18th of September for this purpose, thus relieving the Government from the further conduct of the work and continuance of the inspection service in that State. The New Hampshire inspectors are working in harmony with those under the Marine-Hospital Service in Vermont. The inspec-

¹ Exhibited at the ninth annual meeting of the American Dermatological Association, August, 1885.

tions are having a twofold effect. They not only prevent the introduction into the United States of unvaccinated persons, but have had a reflex influence in stimulating the Montreal authorities to renewed efforts, which, owing to recent decisions of the local courts, they are now fully empowered to carry into effect. Surgeon H. W. Austin, under the direction of the Surgeon-General of the Marine-Hospital Service, has had charge of the organization of the inspection service along the border, from Moose River, Maine, to Buffalo, N. Y.

MORE RESIGNATIONS FROM THE CONGRESS.—DR. HENRY I. BOWDITCH, of Boston, declines the Vice-Presidency of the proposed Congress in the following open letter, which is published in *The Boston Medical and Surgical Journal*:

"Since Dr. J. S. Billings, as Secretary of the Committee for arranging the International Congress for 1887, informed me that I was selected as one of the vice-presidents of the Congress, I have had no official notice either of my summary displacement by the new committee at its meeting in Chicago (June 24) or of my reinstatement by the same committee (Sept. 3). For this and other reasons to be named, I ask a place in your Journal for the following statement: When urged by some friends to sign the protest made in several cities, by gentlemen opposed to the action taken at New Orleans, I replied, 'It would be absurd for me to do so, because the Committee has already expelled me from office.'

"Since that time I have watched with interest the course pursued by *The Journal of the American Medical Association*, and also that of the new committee for the International Congress. I have read with pain the perpetually recurring bitterness and insinuations against all those who had dared to express opinions adverse to the doings of the Association, or those of its new committee. I was surprised and disgusted while reading the editorials of August 1st, entitled 'The International Medical Congress and its Enemies,' and that of August 29th, 'International Medical Congress of 1887 and the American Medical Association.' From these editorials any foreigner reading them would not have the least suspicion that the controversy on the 'Code' had any share in the embroglio, at present existing. I wholly deny that those who now disapprove of the course the Association and its Committee have taken, are the 'enemies of the International Congress.' On the contrary, they are, in my opinion, its best friends.

"Notwithstanding my objection to such editorials, I have continued to decline to sign the protest in the hope that, by so acting, I might perchance do something toward the promotion of professional harmony in America.

"But the last manifesto of the Committee and gross assumption of despotic power for making all future arrangements for the Congress (*vide* 'Executive Committee of the Ninth International Congress,' *Journal American Medical Association*, September 3d) convince me that I can remain no longer in the position to which the new committee (as I learn from the journals) placed me without my knowledge or consent at their meeting in September."

Dr. George W. Major, of Montreal, has declined to serve on the Council of the Section of Laryngology.

REGULATIONS FOR THE MAINTENANCE OF QUARANTINE INSPECTIONS ON THE NORTHERN FRONTIER OF THE UNITED STATES.—Dr. John B. Hamilton, Supervising Surgeon-General U. S. Marine-Hospital Service, has issued the following circular:

The act approved April 29, 1878, entitled "An act to prevent the introduction of contagious or infectious diseases into the United States," provides that no vessel or vehicle coming from any foreign port or country where any contagious or infectious disease exists, or any vessel or vehicle conveying persons, merchandise, or animals affected with any contagious disease, shall enter any port of the United States, or pass the boundary line between the United States and any foreign country, except in such manner as may be prescribed under said act.

Attention is now directed to the prevalence of the contagious and infectious disease of smallpox in Montreal and other places in the Dominion of Canada, and the law referred to is held to apply alike to trains of cars and other vehicles crossing the border, and to vessels entering ports on the northern frontier.

Because, therefore, of the danger which attaches to the transportation of persons and baggage, and articles of merchandise, or animals, from the infected districts, the following regulations are framed, under the direction of the Secretary of the Treasury, and subject to the approval of the President, for the protection of the health of the people of the United States against the danger referred to:

1. Until further orders, all vessels arriving from ports in Canada and trains of cars and other vehicles crossing the border-line, must be examined by a medical inspector of the Marine-Hospital Service before they will be allowed to enter the United States, unless provision shall have been made by State or municipal quarantine laws and regulations for such examination.
2. All persons arriving from Canada by rail or otherwise must be examined by such medical inspector before they will be allowed to enter the United States, unless provision has been made for such examination as aforesaid.
3. All persons coming from infected districts, not giving satisfactory evidence of protection against smallpox, will be prohibited from proceeding into the United States until after such period as the medical inspector, the local quarantine, or other sanitary officer duly authorized, may direct.
4. The inspectors will vaccinate all unprotected persons who desire, or are willing to submit to, vaccination free of charge. Any such person refusing to be vaccinated shall be prevented from entering the United States.
5. All baggage, clothing, and other effects, and articles of merchandise, coming from infected districts, and liable to carry infection, or suspected of being infected, will be subjected to thorough disinfection.
6. All persons showing evidence of having had smallpox or varioloid, or who exhibit a well-defined mark of recent vaccination, may be considered protected, but the wearing-apparel and baggage of such protected persons who may come from infected districts, or have

been exposed to infection, will be subjected to thorough disinfection as above provided.

7. Customs officers and U. S. medical inspectors will consult and act in conjunction with authorized State and local health authorities so far as may be practicable, and unnecessary detention of trains or other vehicles, persons, animals, baggage, or merchandise, will be avoided so far as may be consistent with the prevention of the introduction of diseases dangerous to the public health into the United States.

8. Inspectors will make full weekly reports of services performed under this regulation.

9. As provided in Section 5 of said act, all quarantine officers or agents acting under any State or municipal system, upon the application of the respective State or municipal authorities, are empowered to enforce the provisions of these regulations, and are hereby authorized to prevent the entrance into the United States of any vessel or vehicle, person, merchandise, or animals prohibited under the act aforesaid.

10. In the enforcement of these regulations there shall be no interference with any quarantine laws or regulations existing under or to be provided for by any State or municipal authority.

THE PROFESSORSHIP OF PHARMACOLOGY AT THE JOHNS HOPKINS UNIVERSITY.—It is rumored that Prof. Matthew Hay, of Aberdeen, Scotland, has been offered and will accept this position, and will enter upon its duties next autumn.

THE WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY.—At the annual meeting of the Washington Obstetrical and Gynecological Society, held on October 16, 1885, the following officers were elected for the ensuing year:

President.—Dr. A. F. A. King.

Vice-Presidents.—Drs. W. W. Johnston and J. Taber Johnson.

Recording Secretary.—Dr. C. H. A. Kleinschmidt.

Corresponding Secretary.—Dr. S. S. Adams.

Treasurer.—Dr. G. B. Harrison.

THE DEATH OF PROF. ROBIN.—The founder and for a long time the leader, of the French school of histology, Professor Charles Robin, died on Tuesday last of apoplexy, at the age of 64.

The history of Professor Robin was for a long space of time the history of medical microscopy itself, and he stood prominent as the representative of that branch of study, in opposition to Velpeau and other practical and clinical teachers, who endeavored to cast ridicule upon the microscope and histology as viewed in relation to medical science. The triumph of Robin appeared complete, when, in 1861, a chair of histology was created at the Faculty of Medicine, of which he became, of course, the first occupant. His success was great at first, but he soon became unpopular with the students on account of his extreme severity as an examiner; while on the other hand, the clerical party, then predominant, were incensed at the so-called materialistic tendencies of his lectures and writings. The combination of these two hostile forces led to violent scenes, in which the Professor was hissed, abused, and prevented from speaking. At a later period he regained his popularity through the

petty persecutions of the clerical party, which, among other annoyances, excluded him from the list of persons qualified to sit upon a jury, although at this time Robin was unquestionably one of the most celebrated men of science in Europe. He had become, in spite of strenuous opposition, a member of the Institute in 1866. When the Senate was created, in 1870, Robin was named a Senator by his native department (Ain). He remained a member of the Assembly till his death, although in politics, like many scientific and literary celebrities, he was content to play a dumb part. Indeed, both his qualities and defects made him unfit to play the part of a Demosthenes; he had neither the eloquence nor the assurance which are the stamps of the political orator, and which are seldom developed by a severe process of scientific training.

Robin was one of the chief disciples of Auguste Comte, and one of the founders of the celebrated *Société de Biologie*, along with his intimate friend Claude Bernard. He was also closely connected with Littré, and became with him one of the joint editors of the *Dictionnaire de Nysten*, which, although in the beginning a mere vocabulary of words employed in medical science, became a stumbling-block to orthodox believers, and a sort of gospel to the followers of positivism, through the extreme boldness of some of its definitions, those for instance, of *Ame*, *Homme*, and a few others of the same description. In private life Robin was a most amiable and disinterested man. All his pupils were much attached to him, and he will be sincerely regretted by his numerous friends.

The Chair of Histology at the Faculty of Medicine, left vacant by Robin's death, will probably be disputed by numerous candidates, among whom the most prominent are Drs. Lancereaux and Mathias Duval and Professor Ranvier.—*Medical Times*, October 10, 1885.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM OCTOBER 13 TO OCTOBER 19, 1885.

VOLLUM, E. P., *Lieutenant-Colonel and Surgeon*.—Assigned to duty as Attending Surgeon, Headquarters Department of the Platte, Omaha, Nebraska, relieving Assistant Surgeon Wm. C. Shannon.—*S. O. 103, Department of the Platte*, October 15, 1885.

IRWIN, B. J. D., *Lieutenant-Colonel and Assistant Medical Purveyor*.—Ordered from Department of Arizona to New York City, for temporary duty in charge of Medical Purveying Depot at that place, relieving Captain Henry Johnson, Medical Storekeeper.—*S. O. 233, A. G. O.*, October 10, 1885.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY DURING THE WEEK ENDING OCTOBER 17, 1885.

BALDWIN, L. B., *Passed Assistant Surgeon*.—Detached from Naval Hospital, Philadelphia, and ordered to Navy Yard, Mare Island.

DICKINSON, D., *Surgeon*.—Detached from Naval Hospital, Mare Island, and ordered to Training Ship "Portsmouth," as relief to Surgeon A. M. Moore.

MOORE, A. M., *Surgeon*.—Detached from Training Ship "Portsmouth," and wait orders.

SHAFFER, JOSEPH, *Assistant Surgeon*.—Detached from Receiving Ship "St. Louis," and ordered to Naval Hospital, Philadelphia, as relief of Past Assistant Surgeon Baldwin.

HESTER, F. A., *Assistant Surgeon*.—Detached from United States Steamer "Minnesota" and ordered to the "Tennessee," as relief of Passed Assistant Surgeon Nelson H. Drake.

DRAKE, NELSON H., *Passed Assistant Surgeon*.—Detached from the "Tennessee," 31st instant, and wait orders.